Exhibit 52

HIGHLY CONFIDENTIAL

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

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IN RE THE BEAR STEARNS COMPANIES, INC. SECURITIES, DERIVATIVE, AND ERISA LITIGATION	: Master File No.: 08 M.D.L. No. 1963 (RWS)
This Document Relates To: Securities Action, No. 08 Civ. 2793 (RWS)	: ECF Case
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BRUCE S. SHERMAN, Plaintiff, v. BEAR STEARNS COMPANIES INC., JAMES CAYNE, WARREN SPECTOR and DELOITTE & TOUCHE LLP, Defendants.	: Index No.: 09 Civ. 8161 (RWS)
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VIVINE H. WANG, Plaintiff, v. THE BEAR STEARNS COMPANIES LLC, J.P.MORGAN SECURITIES LLC; J.P.MORGAN CLEARING CORP., DELOITTE & TOUCHE LLP, ALAN D. SCHWARTZ, ALAN C. GREENBERG, JOEY ZHOU, and GARRETT BLAND, Defendants.	: Index No.: 11 Civ. 5643 (RWS)
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REBUTTAL REPORT OF PROFESSOR ALLEN FERRELL
TO THE EXPERT REPORT OF JOHN FINNERTY PH.D.

APRIL 16, 2015

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I. QUALIFICATIONS

1. I am an economist and the Greenfield Professor of Securities Law at Harvard Law School, where I have taught since 1998. I received a Ph.D. in economics from the Massachusetts Institute of Technology with fields in econometrics and finance and a J.D. from Harvard Law School. My Ph.D. thesis concerned the relationship between stock prices and financial disclosures. After law school I clerked for Judge Silberman of the United States Court of Appeals for the D.C. Circuit and Justice Kennedy of the Supreme Court of the United States.

2. I am also a faculty associate at the Kennedy School of Government at Harvard, a fellow at Columbia University's Program on the Law and Economics of Capital Markets, a research associate at the European Corporate Governance Institute, and a member of the editorial board of the *Journal of Financial Perspectives*. I formerly was a member of the Board of Economic Advisors to the Financial Industry Regulatory Authority ("FINRA"), an academic fellow at FINRA, Chairperson of Harvard's Advisory Committee on Shareholder Responsibility (which is responsible for advising the Harvard Corporation on how to vote shares held by its endowment), the ABA Task Force on Corporate Governance, American Law Institute Project on the Application of U.S. Financial Regulations to Foreign Firms and Cross-Border Transactions, and an executive member of the American Law School section on securities regulation.

3. I have testified before the U.S. Senate Subcommittee on Securities, Insurance and Investment and presented to, among others, the U.S. Securities and Exchange Commission ("SEC"), the World Bank, International Monetary Fund, the Structured Products Association and the National Bureau of Economic Research. I have published approximately thirty articles in leading journals in the general area of law and finance, including on the use of

event studies and the estimation of price impact in securities litigation. I have also been an expert witness in a number of securities cases. My testimony in the last four years and academic work are summarized on my curriculum vitae, which is attached hereto as Appendix A.

4. I am being compensated at my customary hourly rate of $1,050 per hour for my work on this matter. My compensation is not contingent on the outcome of this matter. I have received the assistance of the staff employed by Compass Lexecon. Appendix B lists the materials I have considered in my analysis.

II. BACKGROUND, ASSIGNMENT AND SUMMARY OF CONCLUSIONS

5. The Bear Stearns Companies Inc. ("Bear" or the "Company") was a holding company which, through its broker-dealer and international bank subsidiaries, provided investment banking, securities and derivatives trading, clearance and brokerage services to corporations, governments, and institutional and individual investors worldwide.[1] The price of Bear's common stock ("Bear's Stock Price") fell during 2007 and early 2008 as economic conditions in the United States deteriorated.[2] During the week of March 10, 2008, there was "a sharp deterioration in Bear Stearns' liquidity position" and Bear was sold to JPMorgan Chase & Co. ("JPMorgan") for $2 per share.[3]

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1. The Bear Stearns Companies Inc., Annual report to stockholders (Exhibit 13 to The Bear Stearns Companies Inc., Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended November 30, 2006, filed February 13, 2007), at 32.

2. Expert Report of John D. Finnerty, Ph.D., March 2, 2015 ("Finnerty Report"), ¶¶ 22-29 & Attachment 13.

3. The Bear Stearns Companies Inc., Schedule 14A, April 28, 2008 ("Merger Proxy"), available at http://www.sec.gov/Archives/edgar/data/777001/000119312508092860/ddefm14a.htm, at 27-36. The sale price was later changed to $10 per share. *Id.* pp. 35-6.

6. Plaintiff Bruce S. Sherman ("Mr. Sherman" or "Plaintiff") purchased Bear's common stock from June 25, 2007 through March 13, 2008 at prices ranging from $140.76 to $53.77.[4] Mr. Sherman sold all of his Bear common stock on March 19, 2008 for $5.23 per share.[5]

7. Plaintiff alleges Bear "made several related categories of misrepresentations and material omissions."[6] As summarized by Professor John Finnerty in the report he submitted in this case (the "Finnerty Report") they are:

> First of all, defendants are alleged to have made a series of false statements and material omissions regarding the accuracy of Bear Stearns mortgage valuation, VaR and other quantitative models, and regarding the quality of Bear Stearns' risk management strategies and procedures. The defendants knew but failed to disclose throughout the Relevant Period that Bear Stearns' valuation models were outdated and inaccurate, … those models were not updated because Bear Stearns' risk management operations were severely deficient during the Relevant Period. Defendants failed to disclose that Bear Stearns' risk management operations were understaffed at critical points during the Relevant Period, and that those operations lacked the expertise necessary to either effectively monitor complex mortgage and asset-backed transactions, or undertake the needed comprehensive review of Bear Stearns' mortgage valuation and VaR models. …
>
> Second, defendants are alleged to have made a series of false statements regarding the value and the riskiness of mortgages, mortgage-backed and asset-backed securities on the Company's books. …
>
> Finally, Bear Stearns repeatedly made allegedly false statements regarding the adequacy of its liquidity and capital reserves. Those statements -- which were premised on inadequate risk management at Bear Stearns and on asset valuations that were not themselves accurate -- falsely reassured investors that Bear Stearns had sufficient liquidity and capital reserves … From late 2007 onwards, Bear Stearns was desperate for funding, had reached out to non-traditional sources and was aware that its increasingly poor liquidity situation threatened the viability of the

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4. Finnerty Report Attachment 37.

5. Finnerty Report Attachment 37.

6. Finnerty Report ¶ 134.

> Company's business operations. Defendants were, by early 2008, concealing all of the aforementioned problems, i.e., the Company's liquidity issues, and the known deficiencies in the Company's risk management and valuation models and procedures, because they -- correctly -- anticipated that revealing them could prompt a run on the bank. When the Company's severe liquidity problems and inadequate capital reserves were revealed to the market in the second week of March 2008, that outcome materialized, and a run on the bank occurred.[7]

8. In his report Professor Finnerty purports to: 1) analyze the efficiency of the market for Bear's common stock, 2) analyze whether declines in Bear's Stock Price were "attributable to and substantially caused by identifiable news events relating to the disclosure of the fraud allegedly committed by Bear Stearns," and 3) calculate damages sustained by Mr. Sherman "due to the disclosure of the alleged fraud on each fraud disclosure date and also due to any information leakage regarding the alleged fraud during [December 14, 2006 through March 14, 2008, inclusive (the "Relevant Period")]."[8]

9. Professor Finnerty offers multiple opinions on loss causation. First, he claims to have analyzed whether the declines in Bear's Stock Price on March 14, 2008 and March 17, 2008 could be due to "corrective disclosures."[9] He purports to have found that the "disclosure of the alleged fraud" caused Bear's Stock Price to decline from the close on March 13, 2008 through the close on March 17, 2008 (hereinafter the "Purported Corrective Disclosure Period").[10] Second, Professor Finnerty claims Bear suffered from a "run on the bank" between March 10, 2008 and March 17, 2008 and that losses associated with this run should be attributed to the

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7. Finnerty Report ¶¶ 135-137.

8. Finnerty Report ¶ 10. Professor Finnerty indicates his loss causation analysis is "common to plaintiffs in the consolidated and coordinated opt-out actions." *Id.* ¶ 10. His damages analysis, however, is specific to Mr. Sherman. *Id.* ¶ 10.

9. Finnerty Report ¶¶ 11 & 184.

10. Finnerty Report ¶ 11.

alleged fraud.[11] Third, he claims to have "investigated the possibility of leakage of Bear Stearns' alleged fraud-related information during the Relevant Period ..."[12] He purports to have found that "the truth regarding Bear Stearns leaked into the market" from December 20, 2007 through March 13, 2008 (hereinafter the "Purported Leakage Period") and that this leakage caused Bear's Stock Price to decline 25.71%.[13] However, Professor Finnerty makes no attempt to disaggregate his computations to identify any alleged stock price inflation attributable to any specific alleged misstatement or omission. Nor does he attempt to tie the declines in Bear's Stock Price to specific alleged misstatements or omissions.

10. Professor Finnerty purports to calculate damages on the days during the Relevant Period as the number of shares bought times inflation on purchase date.[14] As he states, "[t]he critical component of the damage calculation is the amount of 'inflation' in the firm's share price each day that is directly attributable to the alleged fraud."[15] He uses different methodologies to estimate inflation during the Purported Corrective Disclosure Period, the Purported Leakage Period and the time prior to the Purported Leakage Period (i.e. December 14, 2006 to December 19, 2007).[16]

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11. Finnerty Report ¶ 258. ("Therefore, it is appropriate in my opinion to attribute the portion of the abnormal return on Bear Stearns' common stock on March 17, 2008 associated with the run-on-the-bank effect and the weak-negotiating-leverage effect to the alleged fraud and to include it in my damages calculation."), *Id.* ¶ 137 ("Defendants were, by early 2008, concealing all of the aforementioned problems, i.e., the Company's liquidity issues, and the known deficiencies in the Company's risk management and valuation models and procedures, because they -- correctly -- anticipated that revealing them could prompt a run on the bank. When the Company's severe liquidity problems and inadequate capital reserves were revealed to the market in the second week of March 2008, that outcome materialized, and a run on the bank occurred.").

12. Finnerty Report ¶ 184.

13. Finnerty Report ¶¶ 236 & 261.

14. Finnerty Report ¶ 274 & Attachment 37. Attachment 37 refers to the "Relevant Period." Professor Finnerty defines the Relevant Period as December 14, 2006 through March 14, 2008, inclusive. Finnerty Report ¶ 10.

15. Finnerty Report ¶ 263.

16. Finnerty Report ¶¶ 267, 212-215, 268 & 266.

11. I have been asked by counsel for the Defendants to assess Professor Finnerty's loss causation and damages analyses. I have not been asked to analyze, and do not have an opinion on, the accuracy of Bear's disclosures or whether Bear failed to disclose material information. Based on my review and analysis of the materials listed in Appendix B, I have reached the following principal conclusions:

- Professor Finnerty's analyses of loss causation and inflation during the Purported Corrective Disclosure Period are fundamentally flawed;
- Professor Finnerty has not established that the run on the bank experienced by Bear was caused by the alleged fraud;
- Professor Finnerty's estimation of inflation is fundamentally flawed because it assumes that any problems concealed by the alleged fraud were as severe throughout the Relevant Period as they were at the end of the Relevant Period;
- Professor Finnerty's analyses of loss causation and inflation during the Purported Leakage Period are fundamentally flawed for additional reasons;
- Professor Finnerty does not establish that the alleged fraud caused Bear's Stock Price to decline before the Purported Leakage Period and his estimation of inflation before the Purported Leakage Period is fundamentally flawed;
- Professor Finnerty does not establish that the alleged false statements regarding the value of Bear's mortgages, mortgage-backed and asset-backed securities caused Bear's Stock Price to decline or triggered the bank run.

I elaborate upon and provide the bases for these conclusions in the remainder of this report.

III. PROFESSOR FINNERTY'S ANALYSES OF LOSS CAUSATION AND INFLATION DURING THE PURPORTED CORRECTIVE DISCLOSURE PERIOD ARE FUNDAMENTALLY FLAWED

12. Professor Finnerty claims that the announcement that JPMorgan would buy Bear for $2 per share (the "Acquisition") was a corrective disclosure that caused Bear's Stock Price to fall 77.24% from the close on March 14, 2008 through the close on March 17, 2008 (the

last day in his Purported Corrective Disclosure Period).[17] He then uses this 77.24% decline to estimate inflation on March 14, 2008 and March 13, 2008.[18]

13. Professor Finnerty's analysis is fundamentally flawed because he fails to establish that Bear could have disclosed the Acquisition before the close on the prior trading day (i.e. March 14, 2008). In fact, Bear could not have done so because the Acquisition was not agreed upon until March 16, 2008.[19, 20] Measuring the market's reaction to the release of timely information is not equivalent to measuring the price impact that would have occurred earlier had Bear released information that it could and should have disclosed according to Plaintiff's theory of liability.

14. Professor Finnerty also asserts that the 77.24% price decline on March 17, 2008 "reflects the effect of the final disclosure of the severity of the liquidity problems that Bear Stearns had been experiencing, which it had tried to conceal from the market since at least the

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17. Finnerty Report ¶¶ 259-260 ("I did not find any additional notable news items regarding Bear Stearns other than JPMorgan's purchase of Bear Stearns for $2.00 per share that received any news coverage [after the market close on Friday, March 14, 2008 through the market close on Monday, March 17, 2008]. Therefore, the abnormal return … is attributable to the alleged fraud.… As noted earlier in this expert report, the abnormal return on March 17, 2008 resulting from the news announcements was [negative] 77.24%, which is statistically significant at the 1% level.").

Professor Finnerty lists other disclosures between the close on March 14, 2008 and the close on March 17, 2008 but these were either speculation about an acquisition of Bear by JPMorgan or reactions to the announcement of the $2 per share sale price. *Id.* ¶ 89 ("The news regarding Bear Stearns' sale was the subject of extensive commentary throughout the day."), *Id.* ¶ 248 ("After the market closed on Friday, March 14, 2008, a number of securities analysts and media outlets commented concerning the deal between Bear Stearns and JPMorgan, speculating about a potential JPMorgan buyout of Bear Stearns."), *Id.* ¶¶ 250-251 ("In response to the news announcement that JPMorgan would acquire Bear Stearns, dozens of securities analysts issued analyst reports on March 17, 2008, commenting on JPMorgan's acquisition.").

18. Finnerty Report ¶ 272 & Attachment 31. Professor Finnerty reduces his estimate of inflation on March 13, 2008 by $0.54 based on the PSLRA 90-day look-back provision. *Compare* Finnerty Report Attachment 31 *with* 37.

19. Merger Proxy, at 33.

20. Professor Finnerty also claims that "Bear Stearns management concluded Friday evening [March 14, 2008] that Bear Stearns could no longer continue to operate on its own." Finnerty Report ¶ 248. However, even if this is true, Bear could not have disclosed what its executives would conclude on the evening of March 14, 2008 before that time.

middle of 2007, as the remaining inflation due to the alleged fraud came out of the stock."[21] However, he does not establish that Bear's liquidity problems were as severe prior to the market close on March 14, 2008 as they were afterward or that it was clear before the close on March 14, 2008 how severe Bear's liquidity problems would become.

15. This is particularly important for two reasons. First, it is not as if the market was unaware until the Acquisition announcement of liquidity problems at Bear. For example, it was disclosed to the market, before the opening of trading on March 14, 2008, that Bear was experiencing liquidity problems so severe that it received emergency financing guaranteed by the U.S. Government.[22] Second, there is evidence Bear's liquidity problems were less severe before the close on March 14, 2008. For example, on the evening of March 14, 2008, Bear was informed that the emergency financing it was provided earlier that day would not be available after the weekend.[23] Bear could not have disclosed before the close on March 14, 2008 that the emergency financing would not be available after the weekend because it did not have this information.[24] Again, these two considerations reinforce the previous observation that the market's reaction to the Acquisition announcement on March 17, 2008, and whatever implications this had for Bear's liquidity position as of March 17, 2008, is simply not equivalent to measuring the price impact that

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21. Finnerty Report ¶ 254.

22. Finnerty Report ¶ 238 ("Shortly before the market opened on Friday, March 14, 2008, JPMorgan announced that it had agreed to provide emergency financing to Bear Stearns through the Federal Reserve Bank's Discount Window. The financing came in the form of a secured loan facility for an initial period of up to 28 days. Alan Schwartz, formerly Bear Stearns' President and CEO, stated publicly that, due to ongoing market rumors, 'our liquidity position in the last 24 hours had significantly deteriorated.'") & Business Wire "JPMorgan Chase and Federal Reserve Bank of New York to Provide Financing to Bear Stearns," March 14, 2008. Mr. Schwartz was quoted making the statement Professor Finnerty attributes to him before the market opened on March 14, 2008. Business Wire, "Bear Stearns Agrees to Secured Loan Facility with JPMorgan Chase," March 14, 2008.

23. Merger Proxy, at 29.

24. Professor Finnerty states that "[a]s evidenced by Bear Stearns' conference call [during trading hours on March 14, 2008], Bear Stearns believed that this loan facility would provide the Company access to the liquidity it needed." Finnerty Report ¶ 239.

would have occurred earlier had Bear released some additional negative information about its liquidity position that it allegedly had an obligation to disclose above and beyond what the market had already surmised.

16. Because Professor Finnerty has not established that the purported revelation of the alleged fraud caused Bear's Stock Price to decline on March 17, 2008, he fails to show that there was any inflation in Bear's Stock Price as of March 14, 2008. This is a function of the fact that he claims the inflation on March 14, 2008 is equal to the losses caused by the alleged fraud after the close on March 14, 2008 ($23.17).[25] As for March 13, 2008, Professor Finnerty claims inflation equals $23.17 plus the amount by which he purports to find the "disclosure of the alleged fraud" caused Bear's Stock Price to decline on March 14, 2008 ($23.42, for a total of $46.59).[26] Because Professor Finnerty has not established that the inflation was $23.17 on March 14, 2008, he has not established that inflation on March 13, 2008 was $46.59. If, for example, no losses were caused by corrective disclosures after the close on March 14, 2008, Professor Finnerty's estimate of inflation on March 13, 2008 would fall by approximately half to $23.42 for this reason alone.[27]

IV. PROFESSOR FINNERTY HAS NOT ESTABLISHED THAT THE RUN ON THE BANK EXPERIENCED BY BEAR WAS CAUSED BY THE ALLEGED FRAUD

17. Professor Finnerty attributes Bear's collapse and its sale to JPMorgan for $2 per share to a run on the bank, which in turn "was the foreseeable consequence of Bear Stearns'

25. Finnerty Report ¶ 260, 272 & Attachments 31 & 34.

26. Finnerty Report ¶ 246 & Attachment 31 & 34. Professor Finnerty reduces his estimate of inflation on March 13, 2008 by $0.54 based on the PSLRA 90-day look-back provision. *Compare* Finnerty Report Attachment 31 *to* 37.

27. Finnerty Report Attachments 31 & 34.

undisclosed liquidity problems ..."[28] I agree that a run on the bank played an important role in Bear's collapse. However, Professor Finnerty has not established that the bank run was caused by the alleged fraud.

A. <u>The occurrence of a bank run does not prove a financial institution was insolvent before the run or that there was fraud at the institution</u>

18. The risk of bank runs was well known long before 2008. For example, the authors of a highly cited 1983 paper wrote that "[b]ank runs are a common feature of the extreme crises that have played a prominent role in monetary history."[29] However, prior to the Great Recession, bank runs were primarily thought of as a phenomenon that affected depository

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28. Finnerty report ¶ 137 ("When the Company's severe liquidity problems and inadequate capital reserves were revealed to the market in the second week of March 2008, that outcome materialized, and a run on the bank occurred."), *Id.* ¶ 256 ("The defendants have characterized the sequence of events during the week of March 10, 2008 as a 'run on the bank.' This characterization glosses over Bear Stearns' liquidity, valuation, and risk management issues that came to a head the week of March 10 and resulted in the Company's liquidity crisis, which, at the end, caused Bear Stearns to fail."), *Id.* ¶ 255 ("Some market commentators have blamed at least part of the drop in Bear Stearns' share price during the week of March 10-14, 2008 on a so-called 'run on the bank.' Any such run was the foreseeable consequence of Bear Stearns' undisclosed liquidity problems, ...") & *Id.* ¶¶ 257-258 ("The difference between Bear Stearns' closing share price of $30.00 on Friday, March 14, 2008 and the $2.00 price per share JPMorgan agreed to pay for Bear Stearns' common stock at least partly reflects Bear Stearns' weak negotiating leverage owing to its financial distress and the paucity of potential bidders for Bear Stearns during the weekend of March 15-16, 2008. This weak-negotiating-leverage effect is a direct consequence of the materialization of Bear Stearns' liquidity problems because a highly leveraged and liquidity-strained financial institution is likely to find itself in a weak negotiating position if its liquidity problems are revealed and it then attempts to find another institution to bail it out. Therefore, it is appropriate in my opinion to attribute the portion of the abnormal return on Bear Stearns' common stock on March 17, 2008 associated with the run-on-the-bank effect and the weak-negotiating-leverage effect to the alleged fraud and to include it in my damages calculation.").

Elsewhere in his report, Professor Finnerty claims the alleged misstatements and omissions concealed the <u>*risk*</u> of a bank run: "Defendants were, by early 2008, concealing all of the aforementioned problems, i.e., the Company's liquidity issues, and the known deficiencies in the Company's risk management and valuation models and procedures, because they -- correctly -- anticipated that revealing them <u>*could*</u> prompt a run on the bank. When the Company's severe liquidity problems and inadequate capital reserves were revealed to the market in the second week of March 2008, that outcome materialized, and a run on the bank occurred." Finnerty Report ¶ 137 (emphasis added). However, this claim conflates the risk of bank run with the materialization of that risk, assumes Bear's liquidity problems were as serious during the entire first quarter of 2008 as they were during the week of March 10, 2008 and says nothing about what would have happened if the alleged fraud was revealed before early 2008.

29. Diamond Douglas W. and Philip H. Dybvig, 1983, "Bank Runs, Deposit Insurance, and Liquidity," *Journal of Political Economy*, 91, at 401.

institutions, i.e. institutions that accept deposits from savers ("Depositors") and make loans to borrowers.

19. Depository institutions (such as traditional commercial and savings banks) provide a context to explain the causes of bank runs. They are vulnerable to runs because of differences between the loans they make to borrowers (which are their assets) and the deposits they receive (which are their liabilities). Deposits can generally be withdrawn in total at any time. However, depository institutions generally cannot demand that borrowers repay their loans at any time. Instead loans, such as mortgages, are generally repaid according to a schedule that often extends over many years.

20. Depository institutions are usually stable because only a fraction of their depositors make withdrawals at any one time and even those depositors generally do not withdraw their entire balance. The depository institution can meet these withdrawals with a combination of cash kept in reserve, new deposits from other depositors and repayments on loans made to borrowers.

21. However, if a large number of depositors suddenly want to withdraw their savings, a depository institution may not have enough cash in reserve, new deposits and repayments on loans to meet the demand. In such a case, the bank might need to sell loans quickly to raise the cash necessary to pay depositors. Sudden sales of loans may lead to large losses for the bank because loans are often less than fully liquid; in other words the seller must accept a discount in order to sell them immediately. In such a case, the depository institution would be able to pay off the first depositors who attempted to withdraw their money. But, once the bank used all of its cash on hand, liquidated all of its loans and paid out the proceeds to depositors who wanted to

withdraw their savings, there would be no more money left over for depositors who waited to make withdrawals.[30]

22. The risk of waiting too long to withdraw one's savings, and then being unable to do so, is the force that drives bank runs. Depositors become concerned that withdrawals by others are likely to drive the bank into failure and attempt to withdraw their savings immediately (i.e. they "run").[31] As a result, banks are ultimately dependent on the confidence of their depositors and the confidence of each depositor in turn depends on her perception of the confidence of other depositors.

23. Importantly, a run can occur even if the depository institution would be able to pay all of its depositors in full if given sufficient time to sell its loans (so that it would not have to incur a liquidity discount) or if it could pay off depositors as its loans matured. Therefore the fact that a bank run occurs does not show that financial institution's assets were worth less than its liabilities or that it had not valued its assets correctly.

B. Bear disclosed its vulnerability to a bank run

24. As discussed *supra*, banks are vulnerable to runs because of the risk that they will suddenly lose access to the funds provided by their depositors.[32] In its 2006 and 2007 10-Ks, Bear disclosed that it also faced the risk of losing access to funding: "[l]iquidity, i.e., ready access to funds, is essential to our businesses" and "[l]iquidity risk could impair our ability to fund

30. Diamond, Douglas W. and Philip H. Dybvig, 1983, "Bank Runs, Deposit Insurance, and Liquidity," *Journal of Political Economy,* 91, at 401 ("In fact, the sudden withdrawals can force the bank to liquidate many of its assets at a loss and to fail.").

31. Diamond, Douglas W. and Philip H. Dybvig, 1983, "Bank Runs, Deposit Insurance, and Liquidity," *Journal of Political Economy,* 91, at 401 ("During a bank run, depositors rush to withdraw their deposits because they expect the bank to fail.").

32. Section IV A.

operations and jeopardize our financial condition."[33] As I explain below, Bear also disclosed risks to its liquidity.

1. Bear's Reliance on Repurchase Agreements

25. Bear disclosed that its liquidity depended on its ability to raise money through repurchase agreements. A repurchase agreement is essentially a short term cash loan collateralized by securities.[34] Bear stated in both its 2006 and 2007 10-Ks that "[a]n inability to raise money in the long-term or short-term debt markets, or to engage in repurchase agreements or securities lending, could have a substantial negative effect on our liquidity."[35]

26. Bear also quantified the extent of its dependence on repurchase agreements. In its annual reports, Bear disclosed that it depended on repurchase agreements for approximately $70 billion and $102.4 billion of funding as of November 30, 2006 and November 30, 2007, respectively.[36] Even if one offsets the November 30, 2007 funding from repurchase agreements, by the $27.9 billion Bear had essentially loaned to counterparties under repurchase agreements as

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33. The Bear Stearns Companies Inc., Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended November 30, 2006, filed February 13, 2007, at 21 *see also* The Bear Stearns Companies Inc., Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended November 30, 2007, filed January 29, 2008, at 18.

34. *See, e.g.*, Duffie, Darrell, 2010 "The Failure Mechanics of Dealer Banks," *Journal of Economic Perspectives*, 24, at 55.

35. The Bear Stearns Companies Inc., Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended November 30, 2006, filed February 13, 2007, at 21 & The Bear Stearns Companies Inc., Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended November 30, 2007, filed January 29, 2008, at 18.

36. The Bear Stearns Companies Inc., Annual report to stockholders (Exhibit 13 to The Bear Stearns Companies Inc., Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended November 30, 2006, filed February 13, 2007), at 80 & The Bear Stearns Companies Inc., Annual report to stockholders (Exhibit 13 to The Bear Stearns Companies Inc., Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended November 30, 2007, filed January 29, 2008), at 82.

Professor Finnerty reports similar amounts for securities sold under repurchase agreements in Attachment 8 to his report.

of the same date,[37] Bear was relying on repurchase agreements for approximately $74.5 billion of net funding. This alone exceeded by over $30 billion the combined value of the major sources of liquidity that Bear held in reserve as of November 30, 2007.[38]

2. Customer Payables

27. Professor Finnerty claims "[t]he significant increase in customer payables [through 2007] put an additional cash burden on Bear Stearns when its prime brokerage clients made a 'run on the bank.'"[39] As I explain below, Professor Finnerty is correct that a high level of customer payables can increase the risk of a bank run; however, he ignores the fact that Bear disclosed its customer payables as well as subcategories of customer payables that create liquidity risk such as customers' "Free Credit Balances" and customer margin balances.[40]

28. Free Credit Balances are funds payable by a broker-dealer to its customers on demand; in this way they are similar to deposits in a typical bank.[41] Prime brokers can aggregate Free Credit Balances across clients and use this money to make loans to other prime

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37. The Bear Stearns Companies Inc., Annual report to stockholders (Exhibit 13 to The Bear Stearns Companies Inc., Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended November 30, 2007, filed January 29, 2008), at 82 (showing $28 billion of securities purchased under agreements to resell).

38. The Bear Stearns Companies Inc., Annual report to stockholders (Exhibit 13 to The Bear Stearns Companies Inc., Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended November 30, 2007, filed January 29, 2008), at 45-50. In this section Bear disclosed that it had 1) $17.4 billion in its Parent Company Liquidity Pool (i.e. funds immediately accessible to Bear), 2) "eligible unencumbered, unhypothecated financial instruments" (i.e. assets that could be "monetized to generate liquidity for the repayment of debt or meet other cash outflows as required") with a borrowing value of the $14 billion and 3) $4 billion of unused committed unsecured bank credit. *Id.* 45-50.

39. Finnerty Report ¶ 32.

40. Annual report to stockholders (Exhibit 13 to The Bear Stearns Companies Inc., Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended November 30, 2006, filed February 13, 2007), at 80, The Bear Stearns Companies Inc., Annual report to stockholders (Exhibit 13 to The Bear Stearns Companies Inc., Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended November 30, 2007, filed January 29, 2008), at 44, 82 & 90.

41. Duffie, Darrell, 2010 "The Failure Mechanics of Dealer Banks," *Journal of Economic Perspectives,* 24, at 63 & U.S. Securities and Exchange Commission, Release No. 34-70072; File No. S7-08-07, available at http://www.sec.gov/rules/final/2013/34-70072.pdf, at 49.

brokerage clients.[42] However, if a client with a Free Credit Balance moves its account, the prime broker has to come up with the cash regardless of whether or not it has loaned out the cash in that client's account.[43] Bear Stearns disclosed that its prime brokerage clients had Free Credit Balances of $32.6 billion and $36.1 billion as of November 30, 2006 and November 30, 2007, respectively.[44]

29. Customer margin balances are a second type of customer payable.[45] Prime brokers such as Bear could use the securities in their clients' margin accounts to finance their operations.[46] For example, Bear might allow a client to buy a security by putting up 50% of the cost. Bear would finance the rest of the purchase. Bear was allowed to use the security bought on margin as collateral for a loan.[47] For each $100 it lent to a prime brokerage client, Bear was allowed by regulation to use up to $140 of the client's assets as collateral on new secured loans.[48] However, if the client moved its account to another prime broker, Bear would have to find another source for the net financing raised with the client's margined assets. Bear Stearns disclosed that its

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42. *See, e.g.*, Duffie, Darrell, 2010 "The Failure Mechanics of Dealer Banks," *Journal of Economic Perspectives*, 24, at 63-64.

43. *See, e.g.*, Duffie, Darrell, 2010 "The Failure Mechanics of Dealer Banks," *Journal of Economic Perspectives*, 24, at 63-64.

44. Annual report to stockholders (Exhibit 13 to The Bear Stearns Companies Inc., Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended November 30, 2006, filed February 13, 2007), at 43 & Annual report to stockholders (Exhibit 13 to The Bear Stearns Companies Inc., Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended November 30, 2007, filed January 29, 2008), at 44.

45. Annual report to stockholders (Exhibit 13 to Bear Stearns, Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended November 30, 2007, filed January 29, 2008), at 90.

46. Duffie, Darrell, 2010 "The Failure Mechanics of Dealer Banks," *Journal of Economic Perspectives*, 24, pp. 63-64.

47. Duffie, Darrell, 2010 "The Failure Mechanics of Dealer Banks," *Journal of Economic Perspectives*, 24, at 64.

48. Duffie, Darrell, 2010 "The Failure Mechanics of Dealer Banks," *Journal of Economic Perspectives*, 24, at 64.

customers had borrowed $78.6 billion and $85.8 billion in margin as of November 30, 2006 and November 30, 2007, respectively.[49]

3. Bear's Capital and Leverage

30. Professor Finnerty speculates that "[a] perception that Bear Stearns had insufficient capital and excessive leverage could impair its access to repurchase financing by raising concerns that Bear Stearns was too risky a borrower" and "it is entirely possible that Bear Stearns' high leverage contributed to a lack of confidence in the firm (including unsubstantiated rumors) which had an impact on its collapse."[50] But he ignores Bear's extensive disclosure of its capital and leverage in its annual reports.[51]

C. A number of regulators and analysts attributed Bear's collapse to a run on the bank which was caused by the nature of its funding and the inherent vulnerability of firms like it to a loss of confidence

31. A number of regulators and analysts attributed Bear's collapse to a run on the bank which was caused by the nature of its funding and the inherent vulnerability of firms like it to a loss of confidence. For example, analysts at HSBC wrote:

> … financial institutions rely on confidence, whether it is from depositors or counterparties or investors. When the story becomes murky, as it did at [Bear], confidence can hit a slippery slope, and it clearly did at [Bear]. …We have also witnessed how quickly liquidity can evaporate for securities firms. … The fact of the matter is, securities firms are subject to the same "run on the bank" action as commercial banks, yet they have far less funding

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49. Annual report to stockholders (Exhibit 13 to The Bear Stearns Companies Inc., Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended November 30, 2006, filed February 13, 2007), at 43 & Annual report to stockholders (Exhibit 13 to Bear Stearns, Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended November 30, 2007, filed January 29, 2008) ,at 44.

50. Finnerty Report ¶¶ 195-196.

51. Exhibit 1 & 2.

> alternatives than banks. And that, is a fundamental weakness of the business model.[52]

32. Other analysts focused on vulnerabilities created by Bear's repurchase agreements and customer payables, which, as discussed *supra*, Bear had disclosed.[53] For example, in a report cited by Professor Finnerty, analysts at the Buckingham Research Group pointed to the large size of Bear's borrowing under repurchase agreements ($74.5 billion) and net customer and broker dealer payables ($35 billion)[54] relative to the value of its "total liquidity" which the analysts defined as "cash, other liquid assets and the borrowing value of unencumbered assets" (approximately $35 billion).[55]

33. Regulators reached the same conclusions. Christopher Cox, chair of Bear's primary regulator, the U.S. Securities and Exchange Commission, testified that:

52. Exhibit 3 at 2.

53. Section IV B.

54. The analyst report defines "net payables" as "customer & broker dealer payables minus customer and broker dealer receivables;" Bear's 2007 Annual Report shows payables for customers ($83.2 billion) and "Brokers, dealers and others" ($4.1 billion) as well as receivables for customers ($41.1 billion) and "Brokers, dealers and others" ($11.6 billion); these net to approximately $34.6 billion. *Compare* The Buckingham Research Group, "SECURITIES BROKERS, Evaluating Liquidity at the Rest of the Brokers in a 'Run on the Bank' Scenario," March 17, 2008 *to* Annual report to stockholders (Exhibit 13 to Bear Stearns, Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended November 30, 2007, filed January 29, 2008), at 82.

55. The Buckingham Research Group, "SECURITIES BROKERS, Evaluating Liquidity at the Rest of the Brokers in a 'Run on the Bank' Scenario." March 17, 2008. Although the analyst report does not explain how the value of cash, other liquid assets and the borrowing value of unencumbered assets is calculated, it refers to these items as Bear's "total liquidity" and the value it provides, $35 billion, is essentially the same as the combined value of the major sources of liquidity that Bear held in reserve per its 2007 annual report. See supra ¶ 26 and Note 38 (the sources of liquidity listed in Note 38 total approximately $35 billion). It is also possible the $35 billion figure is calculated as the sum of Bear's cash and cash equivalents ($21 billion) and the borrowing value of unencumbered assets ($14 billion) but this was also disclosed Bear's 2007 annual report. Annual report to stockholders (Exhibit 13 to Bear Stearns, Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended November 30, 2007, filed January 29, 2008), at 46 & 82.

> What happened to Bear Stearns during the week of March 10th was likewise unprecedented. For the first time, a major investment bank that was well-capitalized and apparently fully liquid experienced a crisis of confidence that denied it not only unsecured financing, but short-term secured financing, even when the collateral consisted of agency securities with a market value in excess of the funds to be borrowed. Counterparties would not provide securities lending services and clearing services. Prime brokerage clients moved their cash balances elsewhere. These decisions by counterparties, clients, and lenders to no longer transact with Bear Stearns in turn influenced other counterparties, clients, and lenders to also reduce their exposure to Bear Stearns. Over the weekend of March 15th and 16th, Bear Stearns faced a choice between filing for bankruptcy on Monday morning, or concluding an acquisition agreement with a larger partner. In the cauldron of these events, the actions that the Federal Reserve took … were addressed to preventing future occurrences of the run-on-the-bank phenomenon that Bear endured.[56]

34. Ben Bernanke, Chairman of the Federal Reserve Board, agreed with Chairman Cox at the same hearing stating "I agree with Chairman Cox that there was a remarkable falling off of liquidity, essentially a run on Bear Stearns."[57]

D. <u>The vulnerability to a bank run created by Bear's disclosed leverage and mix of funding is shown by the fate of firms with similar leverage and mix of funding</u>

35. As Professor Finnerty explains, two of the major investment banks, Lehman Brothers and Merrill Lynch, had similar vulnerabilities to Bear and ultimately failed or were rescued from likely failure:

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56. Testimony Concerning Recent Events in the Credit Markets by Chairman Christopher Cox, U.S. Securities and Exchange Commission, Before the U.S. Senate Committee on Banking, Housing and Urban Affairs on April 3, 2008, available at http://www.sec.gov/news/testimony/2008/ts040308cc.htm.

57. Hearing before U.S. Senate Committee on Banking, Housing and Urban Affairs, "Turmoil in U.S. Credit Markets: Examining the Recent Actions of Federal Financial Regulators," April 3, 2008, at 27, available at http://www.gpo.gov/fdsys/pkg/CHRG-110shrg50394/pdf/CHRG-110shrg50394.pdf.

> [Bear's] high ratios of repurchase financing to short-term borrowing, repurchase financing to total debt, repurchase financing to total assets, repurchase financing and customer payables to current assets, repurchase financing and customer payables to total assets, long-term debt to total assets, and total debt to total assets are similar to those of Lehman Brothers, which went bankrupt in September 2008, and Merrill Lynch, which was acquired by Bank of America in September 2008 before it likely would have failed.[58]

The factors Professor Finnerty identifies as demonstrating vulnerability to financial distress: ratios of repurchase financing to short-term borrowing, repurchase financing to total debt, repurchase financing to total assets, repurchase financing and customer payables to current assets, repurchase financing and customer payables to total assets, long-term debt to total assets, and total debt to total assets, were also readily available from information provided in Bear's financial disclosures.[59]

36. The other two major investment banks, Goldman Sachs and Morgan Stanley (both of which Professor Finnerty describes as "comparable to Bear") became regulated bank holding companies almost immediately after the failure of Lehman.[60] Goldman CEO Lloyd Blankfein explained that liquidity was a driving factor in Goldman's decision:

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58. Finnerty Report ¶ 170.

59. Annual report to stockholders (Exhibit 13 to Bear Stearns, Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended November 30, 2006, filed February 13, 2007), at 80 & Bear Stearns, Annual report to stockholders (Exhibit 13 to Bear Stearns, Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended November 30, 2007, filed January 29, 2008), at 82. The balance sheets do not have an item labeled current assets because they break out assets into more detailed categories. *Id.*

60. Duffie, Darrell, 2010 "The Failure Mechanics of Dealer Banks," *Journal of Economic Perspectives*, 24, at 62-63. Lehman, Merrill, Goldman Sachs and Morgan Stanley are all members of Professor Finnerty's Industry Index which he describes as being made up of "common stocks that are comparable to Bear Stearns." Finnerty Report ¶¶ 64-65.

Professor Finnerty includes two other common stocks in his Industry Index (E*Trade Financial Corp. and Charles Schwab Corporation) which he claims are "comparable to Bear Stearns." *Id.* ¶¶ 64-5. However, these common stocks are not comparable to Bear because they served retail, not institutional, clients, as I explain below.

Schwab stated that "[t]he Company's purpose is to help everyone become financially fit. This purpose has led the Company to pursue a strategy of meeting the financial services needs of individual investors both

> "While accelerated by market sentiment, our decision to be regulated by the Federal Reserve is based on the recognition that such regulation provides its members with full prudential supervision and access to permanent liquidity and funding," said Lloyd C. Blankfein, Chairman and CEO of Goldman Sachs. "We believe that Goldman Sachs, under Federal Reserve supervision, will be regarded as an even more secure institution with an exceptionally clean balance sheet and a greater diversity of funding sources."[61]

E. Professor Finnerty has not ruled out the possibility that the bank run was caused by factors unrelated to the alleged fraud

37. Professor Finnerty has not ruled out the possibility that the bank run was caused by factors unrelated to the alleged fraud, in particular, conditions in the financial markets during the week of March 10, 2008 and rumors related to Bear's liquidity.

38. On March 10, 2008 officials at the Federal Reserve Board observed that "[f]inancial conditions [had] worsened considerably in recent days."[62] They noted that market functioning had deteriorated sharply and financial institutions were reducing their lending and they expressed concern that the U.S. "may have entered a new, dangerous phase of the crisis."[63]

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directly and indirectly through its three segments." Schwab 10-K for 2007 available at http://www.sec.gov/Archives/edgar/data/316709/000119312508039024/d10k.htm at 2.

E*Trade stated that it "strive[d] to create a differentiated financial services franchise by providing innovative, easy, low-cost financial solutions and service to retail investors." E*Trade 10-K for 2007 available at http://www.sec.gov/Archives/edgar/data/1015780/000119312508041906/d10k.htm at 1. E*Trade also noted that it transferred "substantially all of [its] asset-backed securities portfolio" to a third party (Citadel) on November 29, 2007. *Id.* at 1.

61. Goldman Sachs, "Goldman Sachs to become the fourth largest Bank Holding Company," September 21, 2008, available at http://www.sec.gov/Archives/edgar/data/886982/000095012308011279/y71449exv99w1.htm. Morgan Stanley disclosed that "[t]he Firm's status as a Federal Bank Holding Company also provides Morgan Stanley ongoing access to the Federal Reserve Bank Discount Window and expanded opportunities for funding." Morgan Stanley, "Morgan Stanley Granted Federal Bank Holding Company Status By U.S. Federal Reserve Board of Governors," September 21, 2008, available at http://www.sec.gov/Archives/edgar/data/895421/000089882208000899/pressrelease991.htm.

62. Federal Reserve Board, Transcript of Conference Call of the Federal Open Market Committee on March 10, 2008, at 4. Available at http://www.federalreserve.gov/monetarypolicy/files/FOMC20080310confcall.pdf

63. Federal Reserve Board, Transcript of Conference Call of the Federal Open Market Committee on March 10, 2008, at 4. Available at http://www.federalreserve.gov/monetarypolicy/files/FOMC20080310confcall.pdf

39. Two areas in which the functioning of the financial markets deteriorated are particularly relevant. First, the discount one must accept to sell a financial instrument immediately (the "bid-ask" spread") widened for many types of financial instruments, indicating a growing liquidity problem in the market.[64] Second, "haircuts" for mortgage-backed securities increased sharply.[65] A haircut is the amount a lender holds back when they make a loan under a repurchase agreement; for example, if a borrower put up a security worth $100 as collateral, a lender who applied a 5% haircut would lend $95. As noted *supra*, Bear relied heavily on repurchase agreements for its funding and it was perceived to be exposed to securities backed by commercial and Alt-A mortgages.[66]

40. The increase in haircuts was also noticed by analysts at JPMorgan on March 7, 2008.[67] They wrote that haircuts on commercial mortgage-backed securities had risen from 7% a year ago to 17% and conditions were even worse for securities backed by Alt-A mortgages; not only had haircuts "skyrocketed" but "financing in this sector [was] severely limited at any level."[68] The JPMorgan analysts attributed the increase in haircuts to the increase in the volatility of securities backed by mortgages and the lack of price transparency in many sectors of the market.[69]

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64. Federal Reserve Board, Transcript of Conference Call of the Federal Open Market Committee on March 10, 2008, at 5. Available at http://www.federalreserve.gov/monetarypolicy/files/FOMC20080310confcall.pdf

65. Federal Reserve Board, Transcript of Conference Call of the Federal Open Market Committee on March 10, 2008, at 5. Available at http://www.federalreserve.gov/monetarypolicy/files/FOMC20080310confcall.pdf & Exhibit 4.

66. *See* ¶¶ 25-26 & *e.g.*, UBS, "First Read: Bear Stearns, New CEO, Same Challenging Outlook," January 8, 2008 & Deutsche Bank, "Bear Stearns Companies Inc., Lower Estimates and Target," February 28, 2008.

67. Exhibit 4.

68. Exhibit 4.

69. Exhibit 4.

41. At the same time liquidity was falling and haircuts were increasing, the value of mortgage-backed securities was falling.[70] These declines are apparent in Table 1 of Exhibit 4. Table 1 shows substantial increases in the option adjusted spreads (referred to as "OAS" in the table) for these securities (securities backed by commercial mortgages are referred to as "CMBS" and securities backed by Alt-A residential mortgages are referred to as "Alt-A" in Table 1).[71] Option adjusted spreads are a measure of the yield on these securities; higher yields generally imply lower prices. Regarding the decline in the value of securities backed by Alt-A mortgages, analysts at Fox-Pitt Kelton wrote on February 29, 2008 that they believed Alt-A values were down 15% in the calendar year-to-date.[72] These price declines would reduce even further the amount that could be borrowed using mortgage-backed securities as collateral.

42. The deterioration in financial market conditions would likely increase concern by market participants about the survival of financial institutions, exactly the concerns that could trigger a bank run. In fact, at the same Federal Reserve Board meeting discussed *supra*, officials noted that "the liquidity issues could become solvency issues, and major financial intermediaries could conceivably fail" and specifically mentioned the sharp decline in Bear's Stock Price that day as a sign of the vulnerability of financial institutions.[73]

43. In the midst of these stressed conditions, there were rumors concerning Bear's liquidity. An academic study of the financial crisis found that at least one of these rumors was prompted by a misunderstanding:

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70. Table 1 of Exhibit 4. showing increases in option adjusted spreads as discussed in this paragraph.

71. Exhibit 4.

72. Fox-Pitt Kelton, "Alt-A Deterioration Prompting Additional Write-Downs," February 29, 2008.

73. ¶¶ 38-39 & Federal Reserve Board, Transcript of Conference Call of the Federal Open Market Committee on March 10, 2008, at 5. Available at http://www.federalreserve.gov/monetarypolicy/files/FOMC20080310confcall.pdf

> … after trading hours ended on March 11, 2008, a hedge fund sent Goldman Sachs an e-mail asking it to step into a contractual relationship that would increase Goldman's direct exposure to Bear Stearns. Given the late request, Goldman only "novated" (accepted) the new contract on the morning of March 12. In the meantime, the late acceptance was (wrongly) interpreted as a refusal and was leaked to the media, causing unease among Bear Stearns's hedge fund clients.[74]

The author wrote that "[t]his incident might have contributed to the run on Bear by its hedge fund clients and other counterparties" and noted the run took the form of a refusal to provide funding under repurchase agreements and the withdrawal of Free Credit Balances by hedge funds that were clients of its prime brokerage unit.[75] As explained *supra,* Bear had disclosed its reliance on repurchase agreements and the amount of Free Cash Balances deposited by its prime brokerage clients.[76]

44. On the morning of March 13, 2008, the Wall Street Journal published an article stating that Bear "is facing increasingly tough trading conditions" and "some of Bear's counterparties are becoming increasingly cautious."[77] The article also quoted a Merrill Lynch analyst observing that "[w]e know that firms on Wall Street, given the nature of the balance sheet and their need to constantly replace funding, can succumb to liquidity crises even if they're fundamentally solvent …"[78] Although the article stated that "wall street executives" believed Bear's fundamental issue was not liquidity or capital as much as erosion of its business model and

74. Brunnermeier, Markus K. (2009), "Deciphering the Liquidity and Credit Crunch 2007-2008," *Journal of Economic Perspectives* 23, 77-100 at 88.

75. Brunnermeier, Markus K. (2009), "Deciphering the Liquidity and Credit Crunch 2007-2008," *Journal of Economic Perspectives* 23, 77-100 at 88 ("Bear's liquidity situation worsened dramatically the next day as it was suddenly unable to secure funding on the repo market.") & 96 ("Furthermore, Bear Stearns essentially experienced a bank run in March 2008 when hedge funds, which typically park a sizable amount of liquid wealth with their prime brokers, pulled out those funds.").

76. Section IV B.

77. The Wall Street Journal, "In Dealing With Bear Stearns, Wall Street Plays Guardedly," March 13, 2008.

78. The Wall Street Journal, "In Dealing With Bear Stearns, Wall Street Plays Guardedly," March 13, 2008.

that "Bear executives say that they are in no danger of a cash crunch and that the company's capital remains more than adequate," the article was seen as a trigger for the run.[79] An analyst at Fox-Pitt Kelton wrote that "on [Thursday] morning, the [Wall Street Journal] published an article raising concerns about confidence in Bear, which became a self-fulfilling prophecy in triggering a run for the exits throughout the day."[80] The analyst's description is consistent with a classic bank run in which depositors become concerned that others have lost confidence in a bank and rush to pull out their money before others do so.

F. Bear's disclosure of subprime mortgage risk exposure

45. Beyond Professor Finnerty's generic claims about undisclosed liquidity problems at Bear, he specifically asserts that "Bear Stearns did not provide adequate disclosure of its subprime mortgage risk in its 2006 annual report or its 2006 Form 10-K report or its other public disclosures" and that

> [t]his lack of disclosure created uncertainty about Bear Stearns' subprime exposure, which was fueled by Bear Stearns' huge asset write-down at the end of fiscal 2007. This uncertainty contributed to the perception of increased risk and intensified Bear Stearns' vulnerability to a loss of investor confidence.[81]

46. Professor Finnerty ignores the fact that Bear disclosed its exposure to subprime mortgages on November 15, 2007 and provided updated information in a December 20, 2007 conference call and a December 21, 2007 SEC filing, which showed Bear was short subprime.[82] These disclosures showed Bear's exposure to subprime mortgages was negative, in

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79. The Wall Street Journal, "In Dealing With Bear Stearns, Wall Street Plays Guardedly," March 13, 2008.

80. Fox-Pitt Kelton, "US Full-Service Securities Firms, Frightening Precedence, Who's Next?," March 17, 2008.

81. Finnerty Report ¶¶ 206 & 209.

82. Exhibit 5.

other words, it would be expected to benefit if subprime mortgages in general declined in value.[83] In addition, Professor Finnerty provides no evidence that the "lack of adequate disclosure" was revealed before March 17, 2007 thereby causing Bear's Stock Price to decline. In fact, he admits that additional information Bear provided to the SEC relating to its 2006 10-K was not disclosed until after Bear had collapsed.[84] Therefore, Professor Finnerty provides no basis to believe this purported lack of adequate disclosure caused any losses to the Plaintiff.

V. PROFESSOR FINNERTY'S ESTIMATION OF INFLATION IS FUNDAMENTALLY FLAWED BECAUSE IT ASSUMES THAT ANY PROBLEMS CONCEALED BY THE ALLEGED FRAUD WERE AS SEVERE THROUGHOUT THE RELEVANT PERIOD AS THEY WERE AT THE END OF THE RELEVANT PERIOD

47. Professor Finnerty uses multiple methods to estimate inflation.[85] However, all of these methods effectively estimate inflation each day by carrying back the price declines Professor Finnerty purports to find were subsequently caused by leakage or disclosure of the alleged fraud.[86] Therefore, Professor Finnerty's estimates of inflation, on every day of the Relevant Period, rely on his assumption that disclosure of the alleged fraud would have had as large an effect throughout the Relevant Period as it purportedly did at the end of the Relevant Period. Showing this assumption is true would require a comparison of the information allegedly misstated or concealed, and the way the market would react to it, at different times during the Relevant Period, something Professor Finnerty has not done. Moreover, there is evidence Professor Finnerty's assumption is false.

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83. Exhibit 5

84. Finnerty Report ¶ 207.

85. Finnerty Report ¶¶ 215, 235, 264-266.

86. *See supra* ¶ 16 & Finnerty Report ¶¶ 213-215 & 266. Although Professor Finnerty states that he "utilized the 'backwardation' method to calculate the but-for price line" during the Purported Corrective Disclosure Period, review of his Attachment 31 shows he actually used the method described *supra* in ¶ 16.

48. For example, Professor Finnerty asserts that Bear's Stock Price was inflated on every day during the Relevant Period by the amount he purports to find Bear's Stock Price declined as a result of the revelation of the alleged fraud on March 17, 2008. He supports this by claiming that the price decline on March 17, 2008 was caused by "the final disclosure of the severity of the liquidity problems that Bear Stearns had been experiencing, which it had tried to conceal from the market since at least the middle of 2007, as the remaining inflation due to the alleged fraud came out of the stock."[87] However, Professor Finnerty does not even establish that Bear's liquidity problems were as severe during trading hours on March 14, 2008 as they were afterward, much less that they were as severe on every trading day from December 14, 2006 through March 14, 2008.[88] Removing the price decline on March 17, 2008 alone from Professor Finnerty's inflation calculations would reduce his estimate of inflation by $20 to $30 on every day of the Relevant Period.[89]

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87. Finnerty Report ¶ 254. Professor Finnerty also claims this decline was due to the announcement of the Acquisition, however he fails to establish that Bear could have disclosed the Acquisition before the close on the prior trading day (i.e. March 14, 2008). *See supra* ¶¶ 12-13.

88. *See supra* ¶¶ 14-15.

89. Professor Finnerty estimated inflation on March 13, 2008 as the sum of his "Disclosure Date damages per share" on March 14, 2008 ($23.42) and March 17, 2008 ($23.17) for a total of $46.59. Finnerty Report ¶¶ 271-272. Removing the price decline on March 17, 2008, inflation on March 13, 2008 would fall to $23.42 under Professor Finnerty's methodology. Professor Finnerty estimates the But-For Price on March 13, 2008 as the actual price minus the inflation he estimates on that date (i.e. $57 - $46.59 = $10.41.) Finnerty Report Attachment 31. Therefore, if inflation on March 13, 2008 was $23.42, the But-For Price on March 13, 2008 would be $57 - $23.42 = $33.58.

Professor Finnerty states that he uses the "backwardation method" to calculate his But-For Prices during the Purported Leakage Period. Finnerty Report ¶ 213. He claims to have worked backward day-by-day to the beginning of the Purported Leakage Period, "adjust[ing] for market and industry-wide effects" as well as "company-specific information that is not related to the alleged fraud." Finnerty Report ¶ 190 & 213. I replicated the results in Professor Finnerty's Exhibit 31, within a penny, by dividing the But-For Price Professor Finnerty purports to find on March 13, 2008 by the "Adjusted Expected Return" which is also provided in Attachment 31 to the Finnerty Report, and then working backward to obtain the But-For Price on each prior day by dividing the But-For Price by the Adjusted Expected Return provided by Professor Finnerty on each day (i.e. to obtain the But-For Price on March 12, 2008, I divide the But-For Price on March 13, 2008 by the Adjusted Expected Return on March 13, 2008). The Adjusted Expected Return is one plus the actual return on days where Professor Finnerty purports to find the "Abnormal Return" is caused by non-fraud related news and one plus the expected return on other days during the Purported Leakage Period. Finnerty Report Attachment 31.

49. In addition, even though Professor Finnerty estimates inflation as far back as December 14, 2006, using the entire decline from December 20, 2007 through March 17, 2008 that he attributes to the disclosure of the alleged fraud, he himself states that Bear's problems became worse after December 20, 2007:

> Bear Stearns' liquidity problems, inadequate capital reserves, and the over-valued assets on its books … had begun to develop by the summer of 2007. After Bear Stearns' earnings release on December 20, 2007, in which Bear Stearns announced the first quarterly loss in its history, these problems grew more severe, until Bear Stearns finally revealed the seriousness of its liquidity problems by announcing on March 14, 2008 that it would receive emergency financing from JPMorgan.[90]

The evidence cited *supra* also provides evidence that conditions in the financial markets did in fact worsen at the end of the Purported Leakage Period.[91]

50. These examples reinforce the previous observation that one cannot assume, as Professor Finnerty does without any basis, that measuring the market's reaction to disclosures at the end of the Relevant Period is equivalent to measuring the price impact that would have occurred earlier had Bear released some additional negative information about its liquidity position that it allegedly had an obligation to disclose above and beyond what the market had already surmised.

If, in my replication, I assume the But-For Price on March 13, 2008 is $33.58, the estimate of inflation falls by $20 to $30 on every day of the Relevant Period.

90. Finnerty Report ¶ 192. *See also* 137 ("From late 2007 onwards, Bear Stearns was desperate for funding, had reached out to non-traditional sources and was aware that its increasingly poor liquidity situation threatened the viability of the Company's business operations. Defendants were, by early 2008, concealing all of the aforementioned problems, i.e., the Company's liquidity issues, and the known deficiencies in the Company's risk management and valuation models and procedures, because they -- correctly -- anticipated that revealing them could prompt a run on the bank.").

91. Section IV E.

51. Moreover, because Professor Finnerty has not established that any problems concealed by the alleged fraud were at least as severe *throughout* the Relevant Period as they were *at the end* of the Relevant Period, when the bank run occurred, Professor Finnerty has not established that a bank run would have occurred if the alleged fraud had been revealed earlier. Therefore, he has not established the further proposition, which he must for his damage calculations to make sense, that for purposes of estimating inflation, the consequences of a bank run should be equated with the price impact associated with an earlier disclosure indicating some additional liquidity issues beyond those already surmised by the market that Plaintiff claims could and should have been made.

VI. PROFESSOR FINNERTY'S ANALYSES OF LOSS CAUSATION AND INFLATION DURING THE PURPORTED LEAKAGE PERIOD ARE FUNDAMENTALLY FLAWED FOR ADDITIONAL REASONS

52. Professor Finnerty purports to analyze loss causation and estimate inflation during the Purported Leakage Period using a method he calls the "backwardation" method.[92] He first purports to calculate "Bear Stearns' but-for common stock prices" ("But-For Prices"), which he claims "would have prevailed had the alleged fraud not occurred."[93] On March 13, 2008, the But-For Price is the closing price minus the inflation on that date.[94] On other days of the Purported Leakage Period, the But-For Price is estimated by dividing the But-For Price on the subsequent

92. Finnerty Report ¶¶ 213-215. Professor Finnerty claims his method is an extension of the "comparable index approach described by Cornell and Morgan (1990)." *Id.* ¶ 191. He admits the comparable index approach "does not adjust for company-specific announcements that are unrelated to the alleged fraud, which causes that approach to overstate the amount of inflation due to the fraud." *Id.* Note 310. He claims to "have eliminated this source of potential bias" by adjusting "for the stock market impact of announcements that are unrelated to the alleged fraud ..." *Id.* Note 310.

93. Finnerty Report ¶ 213.

94. Finnerty Report Attachment 31.

trading day by one plus the "Adjusted Expected Return" on the subsequent trading day.[95] The Adjusted Expected Return is equal to the actual return on Bear's common stock on days where Professor Finnerty claims the "Abnormal Return" is caused by non-fraud related news; on all other days during the Purported Leakage Period (other than March 13, 2008) it is equal to the Expected Return from Professor Finnerty's Modified Model.[96]

53. Based on the results of his "backwardation" method, Professor Finnerty claims "[t]he cumulative abnormal return (CAR) for the entire Leakage Period, that is, the portion of the decline in Bear Stearns' share price over the entire Leakage Period that is attributable to the leakage of information concerning the alleged fraud after controlling for market-wide and industry-wide factors and Company-specific information that is unrelated to the alleged fraud, is [negative] 25.71%, which is statistically significant at the 1% level."[97]

54. Professor Finnerty uses his But-For Prices to calculate inflation. On each day of the Purported Leakage Period, other than March 13, 2008, Professor Finnerty purports to calculate inflation as the difference between the actual share price and his But-For Price.[98]

A. <u>The "backwardation" method Professor Finnerty purports to use to estimate inflation during the Purported Leakage Period is fundamentally flawed</u>

55. Professor Finnerty's "backwardation" method leads him to calculate the amount of inflation that leaked out of Bear's Stock Price as over 50% larger than the sum of the actual price declines he attributes to leakage. Professor Finnerty claims inflation was $79.09 prior

95. Finnerty Report ¶¶ 213-215, 234-235 & Attachment 31.

96. Finnerty Report Attachment 31.

97. Finnerty Report ¶ 236.

98. Finnerty Report Attachment 31 & ¶¶ 213-215. ¶¶ 213-215 are unclear on the method used to calculate inflation on March 13, 2008 but Attachment 31 shows it is the method described in ¶ 16 *supra*.

to the Purported Leakage Period and $46.59 on its last day, a difference of $32.50.[99] The sum of the actual price declines that Professor Finnerty attributes to leakage is only $19.67.[100] If Professor Finnerty limited his estimate of inflation to the actual stock price declines he attributes to leakage, his estimate of inflation as of December 20, 2007 would fall from $79.09 to $66.26.[101]

56. Professor Finnerty's "backwardation" method is inconsistent with his estimation of inflation during the rest of the Relevant Period. On March 13, 2008 and March 14, 2008 he assumes inflation is equal to the sum of the subsequent stock price declines he attributes to corrective disclosures.[102] Prior to the leakage period he assumes inflation is a constant dollar amount ($79.09).[103] Professor Finnerty does not explain these inconsistencies.

57. Professor Finnerty's "backwardation" method also produces internal contradictions in his analysis. For example, on March 6, 2008, Professor Finnerty finds approximately $5 of inflation leaks out of Bear's stock. However, he also purports to find that the "Abnormal Return" on that day (i.e. the actual return minus the "Expected Return" which Professor Finnerty defines as "the return one would expect based on general stock market price

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99. Finnerty Report Attachment 31. Professor Finnerty's calculations ignore the change in Bear's Stock Price on December 20, 2007. *Id.* Attachment 31. I include the change in Bear's Stock Price on this day that is not explained by Professor Finnerty's model (i.e. the "Abnormal Return") because Professor Finnerty claims he "determined conservatively that the leakage of information concerning Bear Stearns' deteriorating financial condition started on December 20, 2007" and Professor Finnerty does not find the "Abnormal Return" on December 20, 2007 was "caused by non-fraud related news." *Id.* ¶ 212 & Attachment 31. The effect of including December 20, 2007 in my analysis is small, it only changes inflation by $0.67 per share. $0.67 is the "Abnormal Return" on December 20, 2007 times the closing price on the previous trading day.

100. Exhibit 6.

101. Exhibit 6. To obtain the actual price declines Professor Finnerty attributes to leakage, I multiplied the "Abnormal Return" on each day during the leakage period, that Professor Finnerty does not find the "Abnormal Return" is due to non-fraud related news, by the closing price the prior day. This is equivalent to assuming "constant dollar inflation" and is the same approach Professor Finnerty uses to estimate the price declines due to the alleged corrective disclosures of March 14, 2008 and March 17, 2008. Finnerty Report ¶¶ 271-272.

102. *See supra* ¶ 16 & Finnerty Report ¶¶ 246 & 260 & Attachments 31 & 34.

103. Finnerty Report ¶ 266 & Attachment 31. Professor Finnerty reduces his estimate of inflation during this period by $0.64 based on the PSLRA 90-day look-back provision. *Compare* Finnerty Report Attachment 31 *with* 37.

movements and industry-related factors that are unrelated to the specific event that is being examined, as reflected in the changes in the prices of stocks of firms in the same industry"[104]) "is caused by non-fraud related news."[105] Because the Expected Return cannot, by definition, be due to the alleged fraud, none of the actual return on March 6, 2008 could have been caused by the alleged fraud.[106] Since the actual return on March 6, 2008 was not affected by the alleged fraud, under Professor Finnerty's analysis, inflation could not have leaked out of Bear's stock on March 6, 2008.

B. Professor Finnerty does not establish that leakage of the alleged fraud caused Bear Stearns' Stock Price to decline over the period from December 20, 2007 to March 7, 2008[107]

58. Professor Finnerty claims that leakage of the alleged fraud caused Bear's Stock Price to decline during the Purported Leakage Period.[108] To support this, he cites downgrades of Bear's bond and commercial paper ratings and the increase in Bear's CDS spreads and credit spreads on Bear's bonds[109] and concludes that "[t]hese patterns of credit deterioration are all consistent with market participants reacting to the leakage of information concerning Bear Stearns' liquidity problems, which grew increasingly severe and eventually culminated in Bear

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104. Finnerty Report ¶ 58.

105. Finnerty Attachment 31 & Note 2 to Attachment 31.

106. *See supra* ¶ 57.

107. I was not asked to consider the causes of the decline in Bear's Stock Price from the close of trading on March 7, 2008 through the close of trading on March 13, 2008. I also do not respond to Professor Finnerty's claims of leakage before December 20, 2007 for the following reason. Although Professor Finnerty claims that "[s]tarting from mid-2007, credit market participants reacted to the information described above that was leaking into the market, as evidenced by the behavior of certain credit indicators for Bear Stearns" he does not begin to measure losses caused by leakage until December 20, 2007 and he assumes inflation is constant prior to that date. Finnerty Report ¶¶ 210, 212 & 266. Therefore, Professor Finnerty's claims of leakage before December 20, 2007 are not relevant to his estimation of inflation or damages.

108. Finnerty Report ¶ 261.

109. Finnerty Report ¶¶ 210-211.

Stearns failing in March 2008."[110] He then reviews statements by market participants he claims show they were becoming aware of the alleged fraud.[111] Finally, he purports to have used the results of his "backwardation" method to find that, over the Purported Leakage Period, "after controlling for market-wide and industry-wide factors and Company-specific information that is unrelated to the alleged fraud, Bear's Stock Price fell 25.71%, which is statistically significant at the 1% level."[112]

1. **Professor Finnerty does establish that the decline in Bear's Stock between December 20, 2007 and March 7, 2008, after controlling for factors unrelated to the alleged fraud, was statistically significant**

59. Professor Finnerty claims that, after controlling for market-wide and industry-wide factors and Company-specific information that is unrelated to the alleged fraud, Bear's Stock Price fell 25.71% from December 20, 2007 through March 13, 2008, which is statistically significant at the 1% level.[113] However, his results are driven by his inclusion of the very end of this period, from March 10, 2008 through March 13, 2008. Exhibit 7 shows that the movement of Bear's Stock Price from December 20, 2007 through March 7, 2008 was in line with that of the firms Professor Finnerty compares it to.

60. I reviewed Professor Finnerty's purported statistical analysis of the daily changes in Bear's Stock Price (i.e. his purported event study) that he purports to use to analyze market efficiency, loss causation and inflation.[114] Exhibit 8 shows that the change in Bear's Stock Price that is not attributable to market-wide and industry-wide factors and non-fraud related

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110. Finnerty Report ¶ 211.

111. Finnerty Report ¶¶ 216-231.

112. Finnerty Report ¶¶ 234-236.

113. Finnerty Report ¶ 236.

114. Finnerty Report ¶¶ 58-67, 86, 92, 234-236, 246 & 260 and Attachments 19 & 31.

Company-specific information (the latter as determined by Professor Finnerty) from December 20, 2007 through March 7, 2008, as measured using the results of Professor Finnerty's purported event study, is not statistically significant at any level of statistical significance used by Professor Finnerty.[115] Therefore, Professor Finnerty's statistical analysis does not establish that the alleged fraud caused Bear's Stock Price to decline from December 20, 2007 through March 7, 2008.

61. Moreover, Professor Finnerty's method for controlling for "company-specific information that is not related to the alleged fraud" is fundamentally flawed.[116] Professor Finnerty's method is to identify days when the Abnormal Return is caused by non-fraud related news and account for this in the "backwardation" methodology.[117] However, as noted *supra*, his "backwardation" methodology is internally inconsistent because it attributes stock price declines to leakage of the alleged fraud on days where Professor Finnerty claims the Abnormal Return on the stock was caused by non-fraud related news.[118]

62. Moreover, Professor Finnerty found non-fraud related disclosures on many dates he claims a decline in Bear's Stock Price was due to leakage but he does not show that leakage, rather than the non-fraud related disclosures, caused the price decline. For example, Attachment 30 to Professor Finnerty's report identifies multiple "Non-Fraud-Related" "news items" on December 21, 2007. However, he concludes, without any explanation, that none of the Abnormal Return on December 21, 2007 was caused by non-fraud related news.[119] Given these

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115. Professor Finnerty presents statistical significance at the 10%, 5% and 1% levels. *See, e.g.*, Finnerty Report Attachment 30, Note 1.

116. Finnerty Report ¶¶ 190-1.

117. Finnerty Report ¶¶ 190-1 & 214.

118. *See supra* ¶ 57.

119. Finnerty Report ¶ 221-222 & Attachment 31.

flaws, Professor Finnerty has not established that he has controlled for factors unrelated to the alleged fraud.

2. The downgrades of Bear's bond and commercial paper ratings and the increase in Bear's CDS spreads and credit spreads on Bear bonds

63. Professor Finnerty claims that the downgrades of Bear's bond and commercial paper ratings and increases in Bear's CDS spreads and credit spreads on Bear's bonds "are all *consistent* with market participants reacting to the leakage of information concerning Bear Stearns' liquidity problems, which grew increasingly severe and eventually culminated in Bear Stearns failing in March 2008."[120] However, he fails to show any of these phenomena were caused by "leakage of information concerning Bear Stearns' liquidity problems" and there is evidence they were not.

64. Professor Finnerty identifies downgrades by credit ratings agencies on November 15, 2007 and December 20, 2007.[121] The November 15, 2007 downgrade occurred over a month before the beginning of the Purported Leakage Period. Therefore it could not have been caused by leakage during the Purported Leakage Period. The downgrade on December 20, 2007 was by Moody's.[122] In its disclosure of the downgrade, Moody's stated that "Bear's ratings also benefit from its ample capital position and strong liquidity profile."[123] Moreover, Professor

120. Finnerty Report ¶¶ 210-211 (emphasis added).

121. Finnerty Report ¶ 210.

122. Moody's Investors Service, "Rating Action: Moody's downgrades Bear Stearns to A2; Outlook stable," December 20, 2007.

123. Moody's Investors Service, "Rating Action: Moody's downgrades Bear Stearns to A2; Outlook stable," December 20, 2007. Moody's cited numerous issues in explaining the downgrade including: "Bear's weak performance in 2007, Moody's view that risk appetite has increased, as well as a more challenging core operating outlook in 2008," Bear's exposure to commercial real estate including "Bear's concentrated risk from its participation in the $26 billion Hilton leveraged buyout transaction," "reduced volumes in the mortgage markets and broader continuing market dislocations [that] make the outlook for 2008 earnings challenging," and "Moody's ongoing concern regarding Bear's corporate governance, including board oversight of management's strategic risk decisions and leadership succession planning." *Id.* Moody's explained that it believed Bear's risk

Finnerty's Attachment 30 indicates that he does not consider the Moody's downgrade to be related to the alleged fraud; he does not include it at all in his list of news items on December 20, 2007. In his list of news items on December 21, 2007, he lists as non-fraud related a news item he describes as "Moody's downgraded Bear Stearns based on higher than anticipated rates of delinquency, foreclosure, and REO in the underlying collateral relative to credit enhancement levels."[124]

65. Professor Finnerty reports that "Bear Stearns' 5-year CDS spread soared from 200 in November 2007 to 619 on March 10, 2008."[125] Putting aside March 10, he ignores the possibility that this increase was caused by market or industry factors or factors specific to Bear that were not related to the alleged fraud.[126] For example, Professor Finnerty ignores the patterns and percent changes of CDS spreads for the companies that make up the Industry Index he uses in his event study; companies he claims "are comparable to Bear Stearns."[127] Exhibit 9 shows that the CDS spreads of these companies followed a similar pattern to Bear Stearns from December 20, 2007 through March 7, 2008. For example, the CDS spread of Lehman Brothers increased from 126bps on December 20, 2007 to 334bps on March 7, 2008, or 165%. Goldman Sachs' CDS spread increased from 69bps on December 20, 2007 to 224bps on March 7, 2008, or 227%. In comparison, Bear Stearns' CDS spread increased from 183bps on December 20, 2007 to 458bps on March 7, 2008, or 151%.

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appetite had increased because of the size of Bear's write-downs on its mortgage and CDO portfolios relative to Bear's earnings and "Bear's concentrated risk from its participation in the $26 billion Hilton leveraged buyout transaction." *Id.*

124. Finnerty Report Attachment 30.

125. Finnerty Report ¶ 210.

126. Finnerty Report ¶¶ 210-211.

127. Finnerty Report ¶¶ 64-65.

66. It is true that Bear's CDS spread increased more in absolute terms than other investment banks'. However, Professor Finnerty fails to establish that this was not due to industry factors. For example, analysts commented that Bear was more exposed to the mortgage market and had less diversification than its peers.[128] This is important because the markets for commercial mortgage-backed securities as well as the market for Alt-A residential mortgages deteriorated from December 20, 2007 through March 7, 2008.[129]

67. Professor Finnerty's discussion of credit spreads on Bear's bonds suffers from the same problem as his discussion of CDS spreads. He claims that Bear's "10-year bond credit spread" increased from 1.4% in June 2007 to 6.4% on March 10, 2008.[130] However, he fails to show that this increase in credit spreads was caused by leakage of the alleged fraud as opposed to market or industry factors or factors specific to Bear that were not related to the alleged fraud.

3. <u>Statements by market participants between December 20, 2007 and March 7, 2008</u>

68. Professor Finnerty does not present any statements by market participants between December 20, 2007 and March 7, 2008 that Bear's Stock Price had declined on suspicion of the alleged fraud. Instead, he presents a series of statements by market participants that he claims show the market was becoming aware of the alleged fraud between December 20, 2007 and March 7, 2008.[131] However, the relationship of these statements to the alleged fraud and any decline in Bear's Stock Price is unclear or speculative.

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128. *See e.g.*, UBS, "First Read: Bear Stearns, New CEO, Same Challenging Outlook," January 8, 2008 & Deutsche Bank, "Bear Stearns Companies Inc., Lowering Estimates and Target," February 28, 2008.

129. *See supra* ¶ 41, Exhibits 4 & 10.

130. Finnerty Report ¶ 210.

131. Finnerty Report ¶¶ 216-227.

69. For example, Professor Finnerty includes a statement by analysts at UBS that "Bear did not announce any capital raise [during a conference call the prior day] (unlike MS [Morgan Stanley], C [Citigroup], and probably MER [Merrill Lynch]) as management feels the firm's capital ratios remain healthy."[132] The way in which this statement shows its author was becoming aware of the alleged fraud is not clear and Professor Finnerty does not explain it.

70. In another example, Professor Finnerty claims that a disclosure by Bear that a hedge fund it was liquidating had decreased in value "would inevitably raise suspicions concerning the reliability of Bear Stearns' valuation models and risk controls."[133] However, as Professor Finnerty explains, the disclosure explained that the decrease in value was "due to the implementation of a new valuation technique, which based the valuation on the lowest price quote the fund obtained from banks and securities firms."[134] Professor Finnerty also states that Bear "had previously used an average of quotes, which had resulted in wide price variations."[135] Professor Finnerty does not provide any explanation or evidence why "the change in valuation technique would inevitably raise suspicions concerning the reliability of Bear Stearns' valuation models and risk controls"[136] and it is not obvious that it would.

71. In at least one case Professor Finnerty appears to mischaracterize an analyst report. He claims that a report by an analyst at Punk Ziegel & Company on February 8, 2008

132. Finnerty Report ¶ 221.

133. Finnerty Report ¶ 226.

134. Finnerty Report ¶ 226.

135. Finnerty Report ¶ 226.

136. Finnerty Report ¶ 226.

"expressed concerns about Bear Stearns' funding strategies ..."[137] However, the report actually suggests that Bear had improved its liquidity:

> The firm has shrunk it[s] balance sheet by a moderate $28 billion, or 6.6%, in the past few quarters. It has been working hard to shift its source of funding. In the past 12 months, the company has made extensive use of the repo markets here and abroad. In this fashion, it has shifted its funding on $43 billion in assets to secured sources from unsecured. This gives Bear the ability to hold on to its assets.[138]

VII. PROFESSOR FINNERTY DOES NOT ESTABLISH THAT THE ALLEGED FRAUD CAUSED BEAR'S STOCK PRICE TO DECLINE BEFORE THE PURPORTED LEAKAGE PERIOD AND HIS ESTIMATION OF INFLATION BEFORE THE PURPORTED LEAKAGE PERIOD IS FUNDAMENTALLY FLAWED

72. Professor Finnerty claims Bear's Stock Price was inflated by the alleged fraud from December 14, 2006 through March 14, 2008.[139] However, he does not attempt to show the alleged fraud caused Bear's Stock Price to decline from December 14, 2006 through December 19, 2007.[140]

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137. Finnerty Report ¶ 225.

138. Punk Ziegel & Company, "Bear Steams," February 8, 2008. Professor Finnerty also claims this analyst report "expressed concerns about ... the quality of the assets on [Bear's] books." Finnerty Report ¶ 225. However, the report states that "[i]n listening to a number of companies in the past few days, it seems to me that the main strategy that is now being employed is to attract capital whenever possible so that questionable assets can be held on balance sheets as long as is necessary. The strategy can work if *the assets have been marked to market appropriately* and the asset in question is still paying interest. *Bear Stearns has clearly adopted this approach*." (emphases added).

    As Professor Finnerty notes, the report does say that Bear increased its Level III assets. Finnerty Report ¶¶ 224-225. However, Bear disclosed detailed information on the amount of Level III assets it held and the report does not suggest that Bear valued these assets inappropriately, only that it valued them on a discounted cash flow basis. Punk Ziegel & Company, "Bear Stearns," February 8, 2008. and The Bear Stearns Companies Inc., Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended November 30, 2007, filed January 29, 2008, pp. 97-98.

139. Finnerty Report Attachment 31.

140. Professor Finnerty performed his purported loss causation analysis for his Purported Leakage Period and the Purported Corrective Disclosure Period. Finnerty Report ¶ 212 ("I determined conservatively that the leakage of information concerning Bear Stearns' deteriorating financial condition started on December 20, 2007.") & ¶¶ 216-261.

73. Professor Finnerty simply assumes the dollar amount of inflation he estimates on December 20, 2007 was present on every day from December 14, 2006 through December 19, 2007.[141] Because, as shown *supra*, 1) his estimate of inflation after December 20, 2007 is fundamentally flawed, and 2) he has not shown that disclosure of any problems concealed by the alleged fraud before December 20, 2007 would have caused the same stock price reaction he purports to find they did afterward, or that they would have caused a bank run, Professor Finnerty has not established there was any inflation in Bear's Stock Price before December 20, 2007.[142]

VIII. PROFESSOR FINNERTY DOES NOT ESTABLISH THAT THE ALLEGED FALSE STATEMENTS REGARDING THE VALUE OF BEAR'S MORTGAGES, MORTGAGE-BACKED AND ASSET-BACKED SECURITIES CAUSED BEAR'S STOCK PRICE TO DECLINE OR TRIGGERED THE BANK RUN

74. Professor Finnerty has not established that the alleged mis-valuation of Bear's assets caused Bear's Stock Price to decline or triggered the bank run. His empirical analysis does not even attempt to separate the effect of misstatements regarding risk management, valuation and liquidity[143] and his report identifies no market commentary that attributes any decline in Bear's Stock Price, or the bank run, specifically to the disclosure or leakage of mis-valuation of Bear's assets. Professor Finnerty cites analyst reports and other market commentary that mention Bear's valuation of its assets but, as I explain below, this does not establish that the alleged mis-valuation of Bear's assets caused Bear's Stock Price to decline.

75. For example, in his discussion of loss causation, he cites a Fitch report issued on March 14, 2008 which states:

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141. Finnerty Report ¶ 266.

142. *See supra* ¶¶ 12-72.

143. Finnerty Report 216-261.

> Up until now, Fitch believed Bear Stearns had managed its balance sheet well through the ongoing credit stressed environment. Bear Stearns suffered recent liquidity deterioration as credit risk re-pricing and declining business opportunities in the overall market continued. As a consequence, there has been a rapid decline in credit investor appetites which has dramatically impaired Bear Stearns' financial flexibility.[144]

The connection of this report to the allegations that Bear mis-valued assets is not clear and Professor Finnerty does not explain it.

76. In another case, Professor Finnerty quotes a conclusory statement from an analyst report on JPMorgan from Fox-Pitt Kelton that discusses the Acquisition:

> [w]ith the deal price of $2/shr (vs Fri close of $30/shr), there is clearly hits to Bear Stearns' balance sheet and impairment not properly reflected. We believe JPM derived the price via est'd further write-downs of leveraged loans, prime/alt-a, and CMBS (we can get to $4b) and deleveraging impact (nearly $6b), which leaves cushion of about $550m.[145]

Professor Finnerty does not even attempt to show this report was accurate or reflected the market consensus or that it affected Bear's Stock Price.[146] Moreover, Professor Finnerty ignores statements by other analysts who wrote that the $2 per share price had more to do with liquidity than solvency and book value, including the Bear Stearns analyst at Fox-Pitt Kelton, whose views Professor Finnerty cites in other parts of his report.[147] That analyst concluded that "Bear's balance sheet appears marked correctly in a non-fire sale context. So a buyer that could keep the assets

144. Finnerty Report ¶ 243 & Fitch Ratings, "Fitch Downgrades Bear Stearns to 'BBB'; Places Ratings on Watch Negative," March 14, 2008.

145. Finnerty Report ¶ 251.

146. *See* Exhibit 11.

147. Finnerty Report ¶ 253, Exhibit 12 & Deutsche Bank, "JPMorgan Chase & Co., Buying Bear Stearns; Industry Update," March 17, 2008 ("One reaction is shock that a company (Bear Stearns) that reaffirmed its book value at around $84 on Wed. can be worth $2 per share four days later on Sunday. ... Yet, the issue is less about solvency and book value than about liquidity.").

could pay far more than $2, while even one that planned a fire-sale could probably beat $2, which reflected the short-term crisis at hand this weekend."[148]

77. The mere fact that Bear was sold for $2 per share does not prove its assets were not valued correctly. There are other reasons for the sale price, in particular, the lack of time potential bidders had to assess Bear's assets (three days) the tumultuous state of the global economy and the fact that Bear had just experienced a bank run.[149]

78. Professor Finnerty speculates that the alleged problems with Bear's valuation models could have caused a run on the bank. He claims that Bear had mark-to-market disputes with counterparties and then speculates that "[s]erious mark-to-market disputes with major broker dealers would imply problems with Bear Stearns' valuation models, which is another source of vulnerability that ***could*** have undermined confidence in Bear Stearns as a repo counterparty."[150] However, he provides no evidence that mark-to-market disputes actually caused Bear's Stock Price to decline or that they caused the run on the bank.[151]

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148. *See* Exhibit 12.

149. Merger Proxy, at 28-33. Professor Finnerty agrees that conditions were "tumultuous" at this time. Finnerty Report ¶ 22.

150. Finnerty Report ¶ 205 (emphasis added). Similarly, Professor Finnerty notes mark-to-market disputes Bear had in March of 2008 and speculates that "[s]uch disputes ***could*** [emphasis added] also reduce the level of confidence that Bear Stearns' trading and repo counterparties had in its valuation models." Finnerty Report ¶ 205.

151. Professor Finnerty does cite an analyst report by The Buckingham Research Group from March 11, 2008 which stated that "the stock traded down sharply yesterday in response to unsubstantiated rumors around the company having 'liquidity issues'... the rumor appeared to be intertwined with some disagreements over the value of collateral seized in the unwinding of Thornburg Mortgage and/or the hedge fund Peloton in London, to which Bear Stearns and 10+ other banks are lenders." Finnerty Report ¶ 231. However, Professor Finnerty does not explain how, if at all, this relates to the effect of allegedly inaccurate valuations by Bear and Plaintiff's losses. In fact the analysts Professor Finnerty cites suggest that these mark disputes did not harm Bear: "Yet, based on our discussions with industry players, it seems that lenders are actually coming out relatively 'whole' on their loans to these players given aggressive haircuts on collateral." The Buckingham Group, "BEAR STEARNS (BSC), Liquidity Concerns Seem Overdone; But Lowering 1Q08 EPS On Continuing Mortgage Market Woes," March 11, 2008.

79. Professor Finnerty claims that "as evidenced by Bear Stearns' internal communications and the 2008 OIG Report, the financial statements issued by Bear Stearns overstated the value of Bear Stearns' mortgage-related assets, and Bear Stearns' management was aware of its overvaluation of those assets."[152] But Professor Finnerty has not valued Bear's assets himself and found its valuations to be incorrect.[153] In addition, in at least one case Professor Finnerty appears to mischaracterize an internal email he uses to support his claim that Bear's assets were overvalued. He quotes an email by Peter Bainlardi which states the implication is "that the desk is being dishonest and systematically mis-marking the book."[154] However, he ignores the next sentence of the email which states "This is just not the case and Risk [Management] does not do a good job in my opinion at recognizing this and explaining it to management."[155]

80. In a number of cases, Professor Finnerty simply assumes his conclusion. For example, he claims that "[s]tarting in early March 2008, rumors circulated in the market regarding Bear Stearns' … valuation issues ...,"[156] and that Bear's valuation issues, among other things, "came to a head the week of March 10 and resulted in the Company's liquidity crisis,

152. Finnerty Report ¶ 167.

153. I have not been asked to value Bear's assets.

154. Finnerty Report ¶ 165. The complete statement from the Finnerty Report is: "An email exchange dated November 8, 2007 between Peter Bainlardi, Michael Nierenberg and Thomas Marano discusses Bear Stearns' risk management practices. Specifically, Bainlardi identifies issues in Bear Stearns' risk management commenting that 'our Risk management refuses to recognize the difference between real market prices we see and the Totem data[,]' and also that risk management's treatment of the trading desk's marks implies 'that the desk is being dishonest and systematically mismarking the book.'" Finnerty Report Exhibit 25.

155. Finnerty Report Exhibit 25.

156. Finnerty Report ¶ 228.

which, at end, caused Bear Stearns to fail."[157] However, he fails to separate the effect of "Bear's valuation issues" from the other issues he discusses.[158]

Allen Ferrell

April 16, 2015

157. Finnerty Report ¶ 256.

158. Finnerty Report ¶¶ 216-261.

APPENDIX A

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CURRENT POSITIONS

Greenfield Professor of Securities Law, Harvard Law School

Member of Editorial Board, Journal of Financial Perspectives

Fellow, Columbia University's Program on the Law and Economics of Capital Markets

Faculty Associate, Kennedy School of Government

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EDUCATION

Massachusetts Institute of Technology, Ph.D. in Economics, 2005
Fields in econometrics and finance

Harvard Law School, J.D., 1995, *Magna Cum Laude*

- Recipient of the *Sears Prize* (award given to the two students with the highest grades)
- Editor, *Harvard Law Review*

Brown University, B.A. and M.A., 1992, *Magna Cum Laude*

PREVIOUS POSITIONS

Harvard University Fellow
Harvard Law School, 1997

Law Clerk, Justice Anthony M. Kennedy
Supreme Court of the United States; 1996 Term

Law Clerk, Honorable Laurence H. Silberman
United States Court of Appeals for the District of Columbia; 1995 Term

COURSES TAUGHT

Securities Regulation
Securities Litigation
Regulation of Market Structure
Law and Finance
Law and Corporate Finance
Contracts

REFEREE FOR FOLLOWING JOURNALS

American Law and Economics Review
Journal of Corporation Finance
Journal of Financial Perspectives
Journal of Law and Economics
Journal of Law, Economics and Organization
Journal of Legal Studies
Quarterly Journal of Economics

CONSULTING AREAS

Price Impact and Securities Damages, Valuation, Mergers & Acquisitions

Papers

"Thirty Years of Shareholder Rights and Stock Returns," with Martijn Cremers, *revise and resubmit Journal of Financial Economics*

"Socially Responsible Firms," with Hao Liang and Luc Renneboog, *revise and resubmit Journal of Financial Economics* (winner of Moskowitz Prize for outstanding quantitative research in socially responsible investing)

"Thirty Years of Shareholder Rights and Firm Valuation," with Martijn Cremers, 69 *Journal of Finance* 1167 (2014)

"Rethinking *Basic*," with Lucian Bebchuk, 69 *Business Lawyer* 671 (2014)

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APPENDIX B

APPENDIX B

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28. Fox-Pitt Kelton, "J.P. Morgan Chase," March 17, 2008.
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EXHIBIT 1

decreased 41.0% to $36.8 million in fiscal 2005 from $62.3 million for fiscal 2004. The pre-tax income decrease relates to $22 million in non-recurring income received from the sale of assets to Dreyfus in fiscal 2004 as well as increased operating costs incurred during fiscal 2005.

Assets under management were $41.9 billion at November 30, 2005, reflecting a 10.8% increase from $37.8 billion in assets under management at November 30, 2004. The increase in assets under management reflects continued increases in traditional equity assets attributable to market appreciation and net inflows. Assets under management at November 30, 2005 include $6.3 billion of assets from alternative investment products, a slight increase from $6.2 billion at November 30, 2004.

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MANAGEMENT'S DISCUSSION AND ANALYSIS

continued

LIQUIDITY AND CAPITAL RESOURCES

Financial Leverage

Asset Composition

The Company's actual level of capital, capital requirements and thereby the level of financial leverage, is a function of numerous variables, including asset composition, rating agency/creditor perception, business prospects, regulatory requirements, balance sheet liquidity, cost/availability of capital and risk of loss. The Company consistently maintains a highly liquid balance sheet, with the vast majority of the Company's assets consisting of cash, marketable securities inventories and collateralized receivables arising from customer-related and proprietary securities transactions.

Collateralized receivables consist of resale agreements secured predominantly by US government and agency securities, customer margin loans and securities borrowed, which are typically secured by marketable corporate debt and equity securities. The nature of the Company's business as a securities dealer requires it to carry significant levels of securities inventories to meet its customer and proprietary trading needs. Additionally, the Company's role as a financial intermediary for customer activities, which it conducts on a principal basis, together with its customer-related activities in its clearance business, results in significant levels of customer-related balances, including customer margin debt, securities borrowed and reverse repurchase activity. The Company's total assets and financial leverage can and do fluctuate, depending largely on economic and market conditions, volume of activity and customer demand.

The Company's total assets at November 30, 2006 increased to $350.4 billion from $287.3 billion at November 30, 2005. The increase was primarily attributable to increases in financial instruments owned, assets of variable interest entities and mortgage loan special purpose entities, securities received as collateral, and securities borrowed, partially offset by a decrease in securities purchased under agreements to resell. The Company's total capital base, which consists of long-term debt, preferred equity issued by subsidiaries and total stockholders' equity, increased to $66.7 billion at November 30, 2006 from $54.3 billion at November 30, 2005. This change was primarily due to a net increase in long-term debt and an increase in stockholders' equity primarily due to fiscal 2006 earnings.

The Company's total capital base as of November 30, 2006 and 2005 was as follows:

<TABLE>
<CAPTION>

(in millions)	2006	2005
<S>	<C>	<C>
Long-Term Borrowings:		
Senior debt	$ 53,307.4	$ 43,227.1
Subordinated debt(1)	1,262.5	262.5
Total Long-Term Borrowings	$ 54,569.9	$ 43,489.6
Stockholders' Equity:		
Preferred stockholders' equity	$ 359.2	$ 372.3
Common stockholders' equity	11,770.2	10,419.1
Total Stockholders' Equity	$ 12,129.4	$ 10,791.4
Total Capital	$ 66,699.3	$ 54,281.0

</TABLE>

(1) Includes $1.0 billion in subordinated debt issued by the Company and $262.5 million in junior subordinated deferrable interest debentures ("Debentures") issued by the Company and held by Bear Stearns Capital Trust III ("Capital Trust III") at November 30, 2006 and $262.5 million in Debentures issued by the Company and held by Capital Trust III at November 30, 2005. See Note 9, "Long-Term Borrowings," and Note 10, "Preferred Stock," in the Notes to Consolidated Financial Statements for further information.

The amount of long-term debt as well as total capital that the Company maintains is driven by a number of factors, with particular focus on asset composition. The Company's ability to support increases in total assets is a function of its ability to obtain short-term secured and unsecured funding, as well as its access to longer-term sources of capital (i.e., long-term debt and equity). The Company regularly measures and monitors its total capital requirements, which are primarily a function of the self-funding ability of its assets. The equity portion of total capital is primarily a function of

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on- and off-balance-sheet risks (i.e., market, credit and liquidity) and regulatory capital requirements. As such, the liquidity and risk characteristics of assets being held are critical determinants of both total capital and the equity portion thereof, thus significantly influencing the amount of leverage that the Company can employ.

Given the nature of the Company's market-making and customer-financing activity, the overall size of the balance sheet fluctuates from time to time. The Company's total assets at each quarter end are typically lower than would be observed on an average basis. At the end of each quarter, the Company typically uses excess cash to finance high-quality, highly liquid securities inventory that otherwise would be funded via the repurchase agreement market. In addition, the Company reduces its matched book repurchase and reverse repurchase activities at quarter end. Finally, the Company may reduce the aggregate level of inventories through ordinary course, open market activities in the most liquid portions of the balance sheet, which are principally US government and agency securities and agency mortgage pass-through securities. At November 30, 2006, total assets of $350.4 billion were approximately 0.5% higher than the average of the month-end balances observed over the trailing 12-month period, while total assets at November 30, 2005 were approximately 5.9% lower than the average of the same time period in the prior year. Despite reduced total assets at each quarter end, the Company's overall market, credit and liquidity risk profile does not change materially, since the reduction in asset balances is predominantly in highly liquid, short-term instruments that are financed on a secured basis. This periodic reduction verifies the inherently liquid nature of the balance sheet and provides consistency with respect to creditor constituents' evaluation of the Company's financial condition.

Leverage Ratios
Balance sheet leverage measures are one approach to assessing the capital adequacy of a securities firm, such as the Company. Gross leverage equals total assets divided by stockholders' equity, inclusive of preferred and trust preferred equity. The Company views its trust preferred equity as a component of its equity capital base given the equity-like characteristics of the securities. The Company also receives rating agency equity credit for these securities. Net adjusted leverage equals net adjusted assets divided by tangible equity capital, which excludes goodwill and intangible assets from both the numerator and denominator, as equity used to support goodwill and intangible assets is not available to support the balance of the Company's net assets. With respect to a comparative measure of financial risk and capital adequacy, the Company believes that the low-risk nature of the items excluded in deriving net adjusted assets (see table) renders net adjusted leverage as the relevant measure.

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The following table presents total assets and net adjusted assets with the resultant leverage ratios at November 30, 2006 and 2005:

<TABLE>
<CAPTION>

(in millions, except ratios)	2006	2005
<S>	<C>	<C>
Total assets	$ 350,433	$ 287,293
Deduct:		
Cash and securities deposited with clearing organizations or segregated in compliance with federal regulations	8,804	5,270
Securities purchased under agreements to resell	38,838	42,648
Securities received as collateral	19,648	12,426
Securities borrowed	80,523	62,915
Receivables from customers	29,482	31,273
Assets of variable interest entities and mortgage loan special purpose entities,		

net	29,080	14,321
Goodwill & intangible assets	383	355
Subtotal	143,675	118,085
Add:		
Financial instruments sold, but not yet purchased	42,256	33,022
Deduct:		
Derivative financial instruments sold, but not yet purchased	11,865	10,975
Net adjusted assets	$ 174,066	140,132
Stockholders' equity		
Common equity	$ 11,770	$ 10,419
Stock-based compensation(1)	816	-
Preferred stock	359	372
Total adjusted stockholders' equity	12,945	10,791
Add:		
Trust preferred equity	263	263
Subtotal - leverage equity	13,208	11,054
Deduct:		
Goodwill & intangible assets	383	355
Tangible equity capital	$ 12,825	$ 10,699
Gross leverage	26.5x	26.0x
Net adjusted leverage	13.6x	13.1x

</TABLE>

(1) Represents stock-based compensation associated with fiscal 2006 awards that was reflected in equity as of the grant date in December 2006, in accordance with SFAS No. 123(R), "Share-based Payment." In previous years, stock-based compensation granted in December was included in stockholders' equity at November year end. Excluding this adjustment for stock-based compensation, gross leverage and net adjusted leverage would be 28.3x and 14.5x, respectively.

Funding Strategy & Liquidity Risk Management

General Funding Strategy

Liquidity is extraordinarily important for financial services firms in general and for securities firms such as the Company in particular, given their reliance on market confidence. The Company's overall objective and general funding strategy seeks to ensure liquidity and diversity of funding sources to meet the Company's financing needs at all times and under all market environments. In financing its balance sheet, the Company attempts to maximize its use of secured funding where economically competitive. Short-term sources of cash consist principally of collateralized borrowings, including repurchase transactions, sell/buy arrangements, securities lending arrangements and customer free credit balances. Short-term unsecured funding sources expose the Company to rollover risk, as providers of credit are not obligated to refinance the instruments at maturity. For this reason, the Company seeks to prudently manage its

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reliance on short-term unsecured borrowings by maintaining an adequate total capital base and extensive use of secured funding. In addition to this strategy, the Company places emphasis on diversification by product, geography, maturity and instrument in order to further ensure prudent, moderate usage of more credit-sensitive, potentially less stable, funding. Short-term unsecured funding sources include commercial paper, medium-term notes and bank borrowings, which generally have maturities ranging from overnight to one year. The Company views its secured funding as inherently less credit sensitive and therefore a more stable source of funding due to the collateralized nature of the borrowing.

In addition to short-term funding sources, the Company utilizes equity and long-term debt, including floating- and fixed-rate notes, as longer-term sources of unsecured financing. The Company regularly monitors and analyzes the size, composition and liquidity characteristics of its asset base in the context of each asset's ability to be used to obtain secured financing. This analysis helps the Company in determining its aggregate need for longer-term funding sources (i.e., long-term debt and equity). The Company views long-term debt as a stable source of funding, which effectively strengthens its overall liquidity profile and mitigates liquidity risk.

Alternative Funding Strategy

The Company maintains an alternative funding strategy focused on the liquidity and self-funding ability of the underlying assets. The objective of this

Source: Bear Stearns 2006 Annual report to stockholders (Exhibit 13 to Bear Stearns, Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended November 30, 2006, filed February 13, 2007), pp. 44-47.

EXHIBIT 2

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THE BEAR STEARNS COMPANIES INC.
MANAGEMENT'S DISCUSSION AND ANALYSIS

The Company's total assets at November 30, 2007 increased to $395.4 billion from $350.4 billion at November 30, 2006. The increase was primarily attributable to increases in cash and cash equivalents, financial instruments owned, and customer receivables, partially offset by a decrease in securities purchased under agreements to resell.

Balance Sheet Size and Variability

Given the nature of the Company's market-making and customer-financing activity, the overall size of the balance sheet fluctuates from time to time. The Company's total assets at each quarter end are typically lower than would be observed on an average basis. At the end of each quarter, the Company typically uses excess cash to finance high-quality, highly liquid securities inventory that otherwise would be funded via the repurchase agreement market. In addition, the Company reduces its matched book repurchase and reverse repurchase activities at quarter end. Finally, the Company may reduce the aggregate level of inventories through ordinary course, open market activities in the most liquid portions of the balance sheet, which are principally U.S. government and agency securities and agency mortgage pass-through securities.

At November 30, 2007, total assets of $395.4 billion were approximately 12.2% lower than the average of the month-end balances observed over the trailing 12-month period, while total assets at November 30, 2006 were approximately 0.5% higher than the average of month-end balances over the trailing 12-months prior. Despite fluctuations in total assets at each quarter end, the Company's overall market, credit and liquidity risk profile does not change materially, since the reduction in asset balances is predominantly in highly liquid, short-term instruments that are financed on a secured basis. This periodic reduction verifies the inherently liquid nature of the balance sheet and provides consistency with respect to creditor constituents' evaluation of the Company's financial condition.

Leverage Ratios

Balance sheet leverage measures are one approach to assessing the capital adequacy of a securities firm, such as the Company. Gross leverage equals total assets divided by stockholders' equity, inclusive of preferred and trust preferred equity. The Company views its trust preferred equity as a component of its equity capital base given the equity-like characteristics of the securities. The Company also receives rating agency equity credit for these securities. Net adjusted leverage equals net adjusted assets divided by tangible equity capital, which excludes goodwill and intangible assets from both the numerator and the denominator, as equity used to support goodwill and intangible assets is not available to support the balance of the Company's net assets. With respect to a comparative measure of financial risk and capital adequacy, the Company believes that the low-risk, collateralized nature of the items excluded in deriving net adjusted assets (see table) renders net adjusted leverage as the more relevant measure.

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THE BEAR STEARNS COMPANIES INC.
MANAGEMENT'S DISCUSSION AND ANALYSIS

The following table presents total assets and net adjusted assets with the resultant leverage ratios at November 30, 2007 and 2006:

<TABLE>
<CAPTION>

(in millions, except ratios)	2007	2006
<S>	<C>	<C>
Total assets	$ 395,362	$ 350,433
Deduct:		
Cash and securities deposited with clearing organizations or segregated in compliance with federal regulations	12,890	8,804
Securities purchased under agreements to resell	27,878	38,838
Securities received as collateral	15,599	19,648
Securties borrowed	82,245	80,523
Receivables from customers	41,115	29,482
Assets of variable interest entities and Mortgage loan special purpose entities, net	30,605	29,080
Goodwill & intangible assets	952	383
Subtotal	184,078	143,675
Add:		
Financial instruments sold, but not yet purchased	43,807	42,257
Deduct:		
Derivative financial instruments	13,492	11,965
Net adjusted assets	$ 214,393	$ 174,067

Stockholders' equity				
Common equity	$	11,441	$	11,770
Preferred stock		352		359
Stock-based compensation		--(2)		816(1)
Total stockholders' equity		11,793		12,945
Add:				
Trust preferred equity		263		263
Subtotal - leverage equity		12,056		13,208
Deduct:				
Goodwill & intangible assets		952		383
Tangible equity capital	$	11,104	$	12,825
Gross leverage		32.8x		26.5x
Net adjusted leverage		19.3x		13.6x

</TABLE>

(1) Represents stock-based compensation associated with fiscal 2006 awards that was reflected in equity as of the grant date in December 2006, in accordance with SFAS No. 123(R), "Share-based Payment." Excluding this adjustment for stock-based compensation, gross leverage and net adjusted leverage would be 28.3x and 14.5x, respectively.

(2) The Company changed the requisite service period associated with its 2007 stock-based compensation awards to align it with the vesting schedules. As a result, an adjustment to stockholders' equity was not applicable.

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Total Capital

The Company's total capital base, which consists of long-term debt, preferred equity issued by subsidiaries and total stockholders' equity, increased to $80.3 billion at November 30, 2007 from $66.7 billion at November 30, 2006. This change was primarily due to a net increase in long-term debt.

The Company's total capital base as of November 30, 2007 and 2006 was as follows:

(in millions)		2007		2006
Long-term borrowings:				
Senior debt	$	67,275	$	53,307
Subordinated debt (1)		1,263		1,263
Total long-term borrowings	$	68,538	$	54,570
Stockholders' equity:				
Preferred stockholders' equity	$	352	$	359
Common stockholders' equity		11,441		11,770
Total stockholders' equity	$	11,793	$	12,129
Total capital	$	80,331	$	66,699

(1) Includes $1.0 billion in subordinated debt issued by the Company and $263 million in junior subordinated deferrable interest debentures ("Debentures") issued by the Company and held by Bear Stearns Capital Trust III ("Capital Trust III") at November 30, 2007 and 2006. See Note 9, "Long-Term Borrowings," and Note 10, "Preferred Stock," in the Notes to Consolidated Financial Statements for further information.

The amount of long-term debt as well as total capital that the Company maintains is driven by a number of factors, with particular focus on asset composition. The Company's ability to support increases in total assets is a function of its ability to obtain short-term secured and unsecured funding, as well as its access to longer-term sources of capital (i.e., long-term debt and equity). The Company regularly measures and monitors its total capital requirements, which are primarily a function of the self-funding ability of its assets. The equity portion of total capital is primarily a function of on- and off-balance-sheet risks (i.e., market, credit and liquidity) and regulatory capital requirements. As such, the liquidity and risk characteristics of assets being held are critical determinants of both total capital and the equity portion thereof, thus significantly influencing the amount of leverage that the Company can employ.

Credit Ratings

Source: Bear Stearns 2007 Annual report to stockholders (Exhibit 13 to Bear Stearns, Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended November 30, 2007, filed January 29, 2008), pp. 51-53.

EXHIBIT 3

Credit Research
US Financials

Bear Stearns Companies
J.P. Morgan Chase

Bailout of Bear Stearns: Stunning loss of value will heighten investor angst toward sector

- The sale of Bear Stearns for USD2 a share graphically illustrates what a toxic cocktail inflexible mark-to-market accounting, leverage, and market-reliant funding can be
- But, let's not lose sight of what has happened: shareholders have incurred rapid and dramatic loss of value, while bondholders figure to come out whole; Bear Stearns being judged as "too big to fail" is positive for the remaining large US securities firms
- Nevertheless we are reiterating our cautious stance on the sector (including GS, LEH, MS, MER) and instituting a short-term trading sell on the bonds of these issuers, and downgrading our fundamental recommendation on LEH to Underweight, based on anticipated loss of investor confidence toward the sector, and recognizing the loss potential to investors subject to mark-to-market; we expect Lehman Brothers and Merrill Lynch to underperform the most over the near term

17 March 2008

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Wow

In dramatic fashion, J.P. Morgan Chase trumped its role in Friday's Federal Reserve support package to Bear Stearns by buying the entire company for just USD270m, or USD2 a share. Bear Stearns began last week trading at USD70.80 a share, and was as high at USD158.39 during the past year. The modest purchase price is decidedly unsettling from our perspective. At a time when investors and analysts are trying to remain comfortable with the integrity of securities firms' balance sheets, the stunning loss of value in Bear Stearns illustrates what a toxic cocktail inflexible mark-to-market accounting practices, leverage, and market-reliant funding can be. Published reports indicate that there were only two bidders for the whole company--JPM and private equity firm JC Flowers.

Deal risk is very low in our opinion. Both boards of directors have approved the deal, as have the Federal Reserve, the Office of the Comptroller of the Currency, and "other agencies." There is no material adverse change clause in the agreement. Closing is to be done on an "expedited" basis, and is targeted on or about June 30. The Fed is providing approximately USD30bn of funding for illiquid assets, mostly mortgages.

Transaction costs will be large, estimated to be USD6bn by JPM, for litigation, the "cost of deleveraging," conforming accounting (that will not comfort investors), and the usual sorts of things ranging from severance, technology, and facilities. JPM estimates that they can earn roughly USD1bn a year from what's left of the BSC franchise once integrated.

Impact of the deal

JPM--Modestly negative

We believe there is little impact to the fundamental creditworthiness of JPM, and spreads should hold in reasonably well. It has both explicit and what we believe is strong implicit support for this transaction from regulators and government officials. It has the ability to eliminate a substantial portion of BSC's cost base. Some of BSC's core competencies will be additive, including mortgages (which JPM has been looking to augment (1) to better serve its massive residential mortgage origination and servicing business, and (2) to take advantage of what could be the most lucrative vulture investing opportunity in recent memory), and prime brokerage. Moody's has affirmed JPM's ratings; we expect S&P and Fitch to follow suit.

BSC--Strongly positive

On its conference call, JPM indicated that it will assume the debt of Bear Stearns, as is customary in bank acquisitions. While a guarantee would be preferable, especially in light of how investors are being whipsawed by Bank of America's reluctance to disclose how it will deal with Countrywide bondholders, an assumption is a very strong action in our opinion that essentially equalizes the target's credit to that of the acquirer. We believe an assumption of BSC debt is in the interests of everyone involved, including the regulators. Given our belief that deal risk is very low here based on the aforementioned considerations, but acknowledging that investors are skittish to say the least, we believe BSC debt should trade within 150bp of JPM. Moody's has placed BSC's Baa1 ratings on review for upgrade; we expect both S&P and Fitch to similarly follow suit.

Securities firms--Near term negative

The stunning loss of value at Bear Stearns will confirm what the most bearish of investors have believed about financial institutions over the years--that they are highly levered, blind pools of risk. We have always believed that is too simplistic. While all of that is true, financial institutions rely on confidence, whether it is from depositors or counterparties or investors. When the story becomes murky, as it did at BSC, confidence can hit a slippery slope, and it clearly did at BSC. We are also reminded that outsized concentrations of risk leave financial institutions in a vulnerable position, and, ironically, BSC's strength across the mortgage banking value chain contributed mightily to its eventual demise when the cycle turned.

We have also witnessed how quickly liquidity can evaporate for securities firms. We have never focused on the various liquidity ratios the securities firms calculate and manage to. You know, the ones that proclaim that they can stay out of the markets for a year and meet debt maturities. That may be true, but we would ask if that matters at all, when counterparties can demand out of "normal" trading relationships at the drop of a hat. As BSC management commented in its Friday conference call, "counterparties who were providing secured financing against assets that are relatively liquid and routinely financed...were no

longer willing to provide financing." The fact of the matter is, securities firms are subject to the same "run on the bank" action as commercial banks, yet they have far less funding alternatives than banks. And that, is a fundamental weakness of the business model.

But before we all run far and fast from securities firms, let's consider what has happened. A midsized firm with a quirky culture and a business concentrated in asset classes that have fallen decidedly out of favor has reached agreement to be acquired by a large, AA-rated commercial bank. And it clearly received "too big to fail" treatment by regulators that have limited oversight, the banking regulators. What this tells us is that the uncertainty surrounding counterparty risk, and how it might affect the global financial system, is of paramount concern to banking regulators and political officials. And that, is a positive that investors should factor in to how they view the remaining large US securities firms--Goldman Sachs, Morgan Stanley, Merrill Lynch, and Lehman Brothers.

We also believe that all four firms have materially more franchise value than BSC, which should provide some comfort to those who worry that there was only one real buyer that showed up to the BSC auction. Eventually, it is hard for us to believe that the commercial banks will end up owning the securities firms. And that would be positive news for bondholders of the securities firms.

So why is this negative news? Simply because we believe the kneejerk reaction is to focus on BSC's share price reaction, not what will happen to its credit spreads. In other words, the loss of value to shareholders is so shocking, it will overwhelm in our opinion what actually happened to bondholders. It also recognizes that BSC's credit spreads widened dramatically (5-year credit default traded as wide as 11 points up front with 500bp running on Friday) before this deal was announced, meaning that credit holders are risking significant mark-to-market losses should confidence in any of these names start to sag.

Accordingly we are reiterating our cautious stance on the sector (including GS, LEH, MS, MER) and instituting a short-term trading sell on the bonds of these issuers, and downgrading our fundamental recommendation on LEH to Underweight. We believe that over time, the combination of what is now a lucrative carry trade coupled with the prospect of possible combinations with commercial banks, as in the case of BSC, will reward investors that stay in the trade. We expect Lehman Brothers and Merrill Lynch, two firms still battling through issues that make investors nervous--mortgages and structured credit, respectively--to lead the underperformance.

Disclosure appendix

Analyst certification

The following analyst(s), who is(are) primarily responsible for this report, certifies(y) that the opinion(s) on the subject security(ies) or issuer(s) and any other views or forecasts expressed herein accurately reflect their personal view(s) and that no part of their compensation was, is or will be directly or indirectly related to the specific recommendation(s) or views contained in this research report: Van Hesser and Daphne Feng

Basis for financial analysis

This report is designed for, and should only be utilised by, institutional investors. Furthermore, HSBC believes an investor's decision to make an investment should depend on individual circumstances such as the investor's existing holdings and other considerations.

HSBC believes that investors utilise various disciplines and investment horizons when making investment decisions, which depend largely on individual circumstances such as the investor's existing holdings, risk tolerance and other considerations. Given these differences, HSBC has two principal aims in its credit research: 1) to identify long-term investment opportunities based on particular themes or ideas that may affect the future earnings or cash flows of companies on a six-month time horizon; and 2) from time to time to identify trade ideas on a time horizon of up to three months, relating to specific instruments, which are predominantly derived from relative value considerations or driven by events and which may differ from our long-term credit opinion on an issuer. HSBC has assigned a fundamental recommendation structure only for its long-term investment opportunities, as described below.

HSBC believes an investor's decision to buy or sell a bond should depend on individual circumstances such as the investor's existing holdings and other considerations. Different securities firms use a variety of terms as well as different systems to describe their recommendations. Investors should carefully read the definitions of the recommendations used in each research report. In addition, because research reports contain more complete information concerning the analysts' views, investors should carefully read the entire research report and should not infer its contents from the recommendation. In any case, recommendations should not be used or relied on in isolation as investment advice.

Definitions for fundamental credit recommendations

Overweight: The credits of the issuer are expected to outperform those of other issuers in the sector over the next six months

Neutral: The credits of the issuer are expected to perform in line with those of other issuers in the sector over the next six months

Underweight: The credits of the issuer are expected to underperform those of other issuers in the sector over the next six months

Prior to 1 July 2007, HSBC applied a recommendation structure in Europe that ranked euro- and sterling-denominated bonds and CDS relative to the relevant iBoxx/iTraxx indices over a 3-month horizon.

Rating changes for long-term investment opportunities

Recommendation History of MORGAN STANLEY

From	To	Date
Overweight	Neutral	2007-11-08
Not Rated	Overweight	2006-12-19

Source: HSBC

Recommendation History of LEHMAN BROTHERS

From	To	Date
Overweight	Neutral	2007-11-08
Not Rated	Overweight	2007-08-01

Source: HSBC

Recommendation History of BEAR STEARNS

From	To	Date
Neutral	Underweight	2007-11-08
Not Rated	Neutral	2007-08-01

Source: HSBC

Recommendation History of GOLDMAN SACHS

From	To	Date
Overweight	Neutral	2007-11-08
Not Rated	Overweight	2006-12-19

Source: HSBC

Recommendation History of MERRILL LYNCH

From	To	Date
Neutral	Underweight	2007-11-08
Overweight	Neutral	2007-10-24
Not Rated	Overweight	2007-08-01

Source: HSBC

Recommendation History of JP MORGAN CHASE

From	To	Date
Overweight	Neutral	2007-07-11
Not Rated	Overweight	2006-12-19

Source: HSBC

Distribution of fundamental credit opinions

As of 16 March 2008, the distribution of all credit opinions published is as follows:

	All Covered Companies		Companies where HSBC has provided Investment Banking in the past 12 months	
	Count	Percentage	Count	Percentage
Overweight	101	23	28	28
Neutral	204	48	50	25
Underweight	126	29	24	19

Source: HSBC

HSBC & Analyst disclosures

Disclosure checklist

Company	Ticker	Recent price	Price Date	Disclosure
BEAR STEARNS	-	-	-	2, 3, 4, 5, 6, 7, 11
GOLDMAN SACHS	GS.N	156.86	15-Mar-2008	2, 4, 5, 6, 7, 11
JP MORGAN CHASE	JPM.N	36.54	15-Mar-2008	2, 5, 6, 7
LEHMAN BROTHERS	LEH.N	39.26	15-Mar-2008	2, 5, 6, 7, 11
MERRILL LYNCH	MER.N	43.51	15-Mar-2008	2, 6, 7, 11
MORGAN STANLEY	MS.N	39.55	15-Mar-2008	2, 5, 6, 7, 11

Source: HSBC

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3 At the time of publication of this report, HSBC Securities (USA) Inc. is a Market Maker in securities issued by this company.
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EXHIBIT 4

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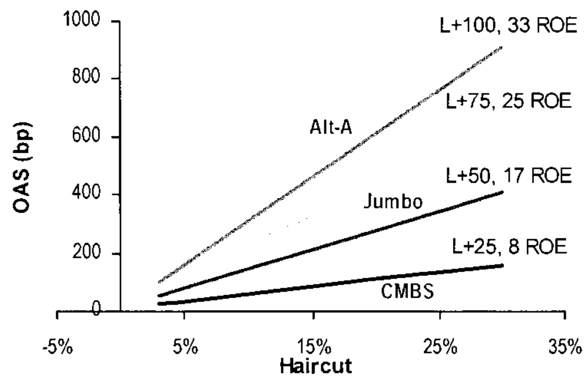
MBS

- **Deleveraging has reached full force, with a number of REITs and hedge funds selling assets this past week**
- **We examine the amount of spread widening that theoretically should result from an increase in haircuts, and find that many mortgage sectors have tracked this widening**
- **In a delevering environment, historical regressions become irrelevant, relative value takes a back seat, and the sectors with the widest original spreads end up widening the most; the "floor" to valuations can become the yield that will attract unlevered investors**
- **Despite historically wide spreads, we remain negative on the mortgage basis, as further REIT delevering of $20-40bn could follow as spreads widen and haircuts continue to increase**
- **Remain negative on the mortgage basis: Negative hedge-adjusted carry of 5 ticks per month makes the basis overweight expensive**
- **Despite the increase in speeds in February, credit-impaired borrowers continued to pay slow, and up-in-coupon is still attractive**
- **Buy 15-years over 30-years for their lower convexity costs and cheap fundamental valuations (OAS pickups) versus 30-years**
- **Be tactically negative on agency hybrids owing to concern about further delevering**
- **The MBA released the 4Q07 National Delinquency Survey; the series showed continued deterioration in mortgage credit, with foreclosures rising by 20% in the quarter**
- **US banks' MBS holdings rose by $2bn for the week ending February 27, 2008; holdings in residential mortgage loans rose by $6bn while C&I loans grew by $4bn**

Chart 1: Roadmap for spread widening in a deleveraging world

Greater haircuts force spreads wider: Spreads required to maintain a constant ROE for four hypothetical assets; sector labels identify sectors that have experienced spread widening similar to the trajectory of each line



Source: JPMorgan

The widening in many parts of the mortgage market over the past weeks has been the fallout from a new wave of deleveraging. A number of investors, including large hedge funds and REITs, have disgorged large amounts of bonds—not because they were of bad credit quality necessarily, but because haircuts were raised, forcing them to raise capital. What should the effect of this be on the markets? **How much spread widening is appropriate?**

To answer this question, we put our ROE framework to use—in reverse. To clarify, we have often used spreads, financing, and haircuts across sectors to calculate the ROE of each sector. However, **given an assumed ROE, we can instead look at the impact of rising haircuts on spreads**, keeping the ROE constant. The premise is that as we move to a less-levered (or unlevered) world, spreads need to widen in order to draw in the marginal investor who is looking for a certain return hurdle.

Let's put some numbers on it. Assume that we are back in January 2007, before the crisis hit in full force. Consider four different hypothetical assets that trade at Libor+25bp, +50bp, +75bp, and +100bp. Each is assumed to have a 3% haircut, and finances at Libor+10. The ROEs of these assets range from 8% to 33%.

Now consider the scenario that has occurred over the past six months and especially in the past couple of weeks: increased haircuts and deleveraging. Chart 1 shows the

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effect on spreads. **If haircuts rise to 30%, in order to attract investors to the asset initially priced at L+25, spreads must now widen to roughly Libor+200bp to maintain the original ROE.** Meanwhile, using similar analysis, the original Libor+100bp security must reprice to a spread of 1,000bp.

While this is a hypothetical exercise, its parallel with the spread widening that has occurred is uncanny. For instance, the security that went from Libor+20 to 200 sounds a lot like CMBS. The one that went from Libor+100 to 1,000 sounds like parts of the Alt-A market. The middle lines remind us of the prime jumbo spread-widening experience.

While we simply are drawing broad comparisons to actual spread moves (any similarities to real sectors, either living or dead, is purely coincidental!), we believe this approach offers some important lessons:

1. **Historical spread comparisons and regressions have little relevance in a massive wave of deleveraging.** Even FNMA 5.5s are no exception to this. Deleveraging has triggered spread widening and in turn more selling, which has pressured balance sheets. This pushes rolls lower and pass-through spreads wider, independent of where these bonds have traded in the past.

2. **Asset quality and relative value analysis take a back seat.** Over the long run, these are important considerations. But as for this particular moment, a REIT that is forced to sell couldn't care less whether spreads are at the widest levels in history (vol-adjusted or otherwise). In fact, the decision to sell is practically independent of the assets they hold: whether prime hybrids, Treasuries, or gold, when financing is pulled, deleveraging must occur (or capital must be raised).

3. **The widest widen the most.** As we showed in Chart 1, investors were initially drawn to credit sectors because of the attractive returns they offered after financing. Now that financing is gone, these wide sectors need to offer equity-like returns to entice the marginal investor back. The levered 15% return must now return the same, but on an unlevered basis.

Table 1 provides some perspective on what's actually happened most recently. As of this past Thursday, haircuts shot up again, as deleveraging went into full force. Some

Table 1: Haircuts higher, spreads wider
Indicative haircuts and OASs by sector

	Present		1 mo. ago		12 mos. ago	
Sector	Haircut	OAS	Haircut	OAS	Haircut	OAS
Pass-throughs	3-5%	55	2-3%	10	2-3%	0
Agency ARMs	5-7%	115	3-4%	80	3-4%	15
CMOs (3Y SEQ)	7-10%	80	3-5%	10	2-3%	-10
Jumbo Fixed	10-15%	110	5-7%	60	3%	15
Jumbo ARMs	10-20%	300	5-7%	110	3%	50
Alt-A	20-30%	1000	10%	400	3-5%	100
CMBS	10-20%	295	5-10%	140	3%	25

Source: JPMorgan

striking examples include CMBS, where haircuts have surged by 7% to 17% relative to a year ago. Alt-A haircuts have also skyrocketed, though actual availability of repo financing in this sector is severely limited at any level. Even pass-throughs—which up to now had been immune from the margin calls—have experienced haircuts doubling from 2-3% to 4-5%. Despite the widening in spreads so far, this is one of the most negative developments yet for the basis, and will force another wave of deleveraging. For this reason, **we are very negative on the mortgage/swap basis in the short term.**

There could easily be more deleveraging to come. We estimate that there is about $35bn in hedge fund capital dedicated to mortgages—assuming 10x leverage (roughly), this would imply there is $350bn in hedge fund mortgage assets. Meanwhile, REITs still own about $140bn in mortgage assets, and further margin calls could trigger more selling from these investors. We estimate about $20-40bn in forced sales could follow. Citi announced that it will reduce its mortgage holdings by $45bn in 2008 (see related discussion below), and other banks could follow suit.

Why have repo desks raised haircuts, especially at a time when such action would create even more turbulence in the markets? Two reasons. First, in normal times, haircuts are determined based largely on the price volatility of the asset. **With prices on many assets moving by points in the past week, it's no surprise haircuts have risen, even for pass-throughs** (Chart 2). Roughly speaking, it makes sense that haircuts on pass-throughs have doubled since price vol has roughly doubled. Second, price transparency for many sectors is poor, to say the least. Repo desks are forced to be conservative on valuations and haircuts in light of this.

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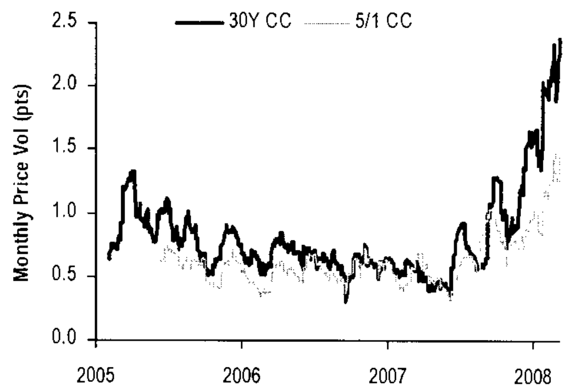
Taking our deleveraging analogy to its logical extreme, many sectors are probably heading to unlevered (100% haircut) valuations. That means that certain sectors are continuing to move to the right of the graph in Chart 1, until they reach double-digit unlevered returns that will finally draw investors back in. Certain tranches of ABX are already well into this territory, yet they continue to widen. **Aggravating the problem is that this deleveraging is forcing a huge amount of assets into the hands of a shrinking investor base, as hedge funds and other investors are being shut down in unprecedented numbers.** Barring a large policy surprise, we expect that relative value for many sectors will return to a pure yield-based framework, rather than Libor-funded. We highlight what the world looks like in a pure yield framework in Table 2.

The good news in all of this is that for unlevered investors, there are opportunities springing up. One framework we like is looking at each sector on a total return basis over an investment horizon, where the return comprises several components: 1) marking down the asset for the initial bid/ask, 2) earning the carry until the horizon, and 3) repricing the asset for the anticipated spread tightening. This approach will highlight why the basis is not a good way to express a view that the world will get better. The mortgage/swap basis, despite its wide historical spreads, carries at *negative* 6 ticks per month, after adjusting for the cost of rebalancing the position in the current high vol environment. **So if you think mortgages are 20 ticks cheap, for instance, then they had better tighten within the first three to four months or you are underwater on the trade.** Instead, we think other sectors offer better risk/reward in that they carry well on a hedge-adjusted basis, so owning these sectors makes time on your side, before the market tightens. We believe it is too early to get into many of these sectors (in light of the delevering), but having a framework in place is key right now.

What are the signs to get back in the market? There had been a couple of false glimmers of hope recently. We highlighted the success that REITs had in raising over $1bn in capital in January alone, the largest issuance quarter (let alone month) ever. However, **while non-agency REITs have been forced to delever recently, their agency hybrid counterparts may follow suit now, as haircuts have now risen on this collateral as well.** Meanwhile, the portfolio cap elimination for Fannie and Freddie was greeted with sharp spread tightening early on, but the outlook for agency purchases has dimmed on concerns about the mortgage insurers' and the agencies' need to conserve capital in this environment. Another sign would be the emergence of a large-scale government program. A proposal for the government to refinance a portion of homeowners' mortgage debt was discussed in *The Wall Street Journal* on Friday. In such a plan, the government would finance a portion of the mortgage (e.g., above an LTV threshold) at Treasury rates. While this is still in discussion, the emergence of a plan of this scale would be a significant development in turning the corner in this crisis.

Chart 2: Higher price vol has helped drive repo haircuts higher
One-month rolling historical price volatility on 30-year and hybrid current coupons



Source: JPMorgan

Table 2: In an unlevered world, yield is king
Indicative yields and duration by sector

	Yld(%)	Dur (yrs)
TBA 6s	6.0%	4.2
Prime 6s	6.8%	4.8
Alt-A 6s	8.0%	5.0
Agy 5/1	5.0%	2.8
Prime 5/1	7.0%	3.5
Alt-A 5/1	9.0%	4.5

poor performing

	Yld(%)	Dur (yrs)
Prime 6s	7.2%	5.0
Alt-A 6s	11.0%	5.2
Prime 5/1	10.0%	3.8
Alt-A 5/1	15.0%	3.0

Source: JPMorgan

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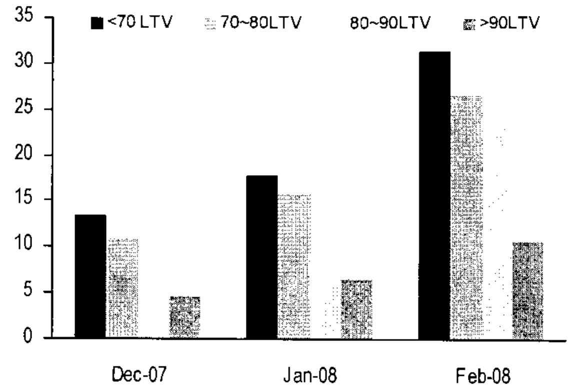
Prepayments pick up in February, but credit impairment continues to be the theme

Speeds on conventionals increased above consensus in February, with speeds on 2006 FNMA 6s up 14 CPR. While these speeds were a surprise to most investors, we caution that credit impairment remains a very strong deterrent to prepayments for many borrowers, especially in higher coupons. Most of the increase in speeds came in lower coupons, not 6.5s and 7s. To put things in perspective, FNMA 5.5s paid within 2 CPR of 7s last month! We believe it is probable that much of the closings were front-loaded into February in order to lock in historically low rates, and to avoid a jump in g-fees. But to investigate the credit impairment argument further, Chart 4 shows speeds on 2007 Gold 6s by LTV over the past several months. Most of the speed increases were concentrated in lower LTV 6s, rather than higher LTVs. In fact, the difference between low and high LTV pools reached 20 CPR. While the prepay news was a concern for lower-coupon callability, higher coupons such as 6.5s continue to be very tame. Remember, 6.5s were as much as 150bp in the money, but prepaid at only 26 CPR. Consequently, we continue to like the up-in-coupon trade, particularly into 6.5s. Speeds on 5s when in the money should have little resemblance to the speeds on credit-impaired higher coupons, such as 6.5s.

Agency jumbo—loans limits and g-fees

The upcoming agency jumbo market passed a couple of significant milestones this week. First, HUD officially published individual area limits. These limits are in general higher than most estimates. Congress gave HUD wide latitude in how it can define "local area". HUD's implementation was quite generous. **Specifically, HUD applied the highest county level median home prices to the entire MSA.** For instance, the MSA level median home price in the DC metro area was roughly $470k, which would translate to a $588k limit. However, HUD based its calculation on the highest county level median price within DC metro area, likely the Arlington county right outside DC, and applied it to the entire region. Using these higher published loan limits, we estimate that roughly 35% of the outstanding jumbo prime universe would become newly eligible, up from our previous tally of 25%.

Chart 3: Despite the headline news, speeds on credit-impaired (high LTV) borrowers remained tame
Recent prepayments on 2007 vintage Gold 6s



Source: JPMorgan

Separately, Fannie Mae published underwriting guidelines and g-fees for agency jumbos. Key provisions for fixed-rates are summarized below:

1) Minimum FICO of 660 and maximum LTV of 90%

2) However, if LTV > 80, then 700+ FICO is required

3) Cash-out refis are not permitted

4) Full documentation required

Fannie Mae announced an additional guarantee fee of 8 ticks for jumbo mortgages (as loan delivery charges), equivalent to about 6-8bp rate impact to borrowers, depending on lenders' assumptions of servicing valuation. In our view, these measures are extremely positive for the jumbo market. Fears of high g-fees are thus allayed.

What about secondary pricing (as these jumbos won't be TBA eligible)? In this regard, Fannie Mae stated that it will release whole loan pricing grids beginning April 1. In effect, Fannie intends to "jump-start" the market and remove the uncertainties that originators might face due to the lack of TBA pricing. Though somewhat dependent on Fannie's loan pricing policies, we believe that ultimately the agency jumbo rates will likely range from 20bp to 30bp

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above conventionals, assuming loans priced at ½ point to 1 point back of conventionals. This would be a vast improvement over the current spread of over 100bp.

Week in review

- Yesterday **Citigroup announced plans to reduce mortgage assets by $45bn** over the next year. This move will help it rebuild capital. Citi indicated that it did not intend to engage in a fire sale and that the asset reduction will come mainly from increased securitizations, runoffs, and lower origination volumes with a focus on agency securities. Given its statement, **we expect the effect of this reduction to be spread out but nevertheless pressure the market with more supply**. As of the fourth quarter of 2007, Citigroup held $63bn in MBS ($22bn pass-throughs, $42bn in non-agency CMOs) and $215bn in one- to four-family residential mortgage loans. Historically, Citi has been steadily growing mortgage loan holdings with a relatively small portfolio in securities. However, in the third quarter of 2006 alone, it added $66bn of securities, boosting MBS holdings four-fold.
- **Hedge funds and REITs are being hit by massive margin calls** by repo lenders as asset values dropped. Specifically, Thornburg has not met $610mn of margin calls.
- **The MBA released the 4Q07 National Delinquency Survey.** Not surprisingly, the series showed continued deterioration in mortgage credit. Specifically, foreclosures rose by 20% in the quarter to 2.04% of all loans outstanding. The seriously delinquent rate (90+ days) for prime loans rose to 1.68% from 1.31%.
- **HUD published area-by-area loan limits for agency jumbo mortgages.** At first glance, these limits are pretty generous, i.e., they are higher than earlier estimates.
- **Bernanke encouraged banks to forgive principal on the portion of loans where the mortgage amount is greater than the current value of the home,** in an attempt to curb foreclosures. Defaults are not only driven by ability to pay; those experiencing negative home equity may simply choose to walk away.
- **US banks' full implementation of Basel II could be delayed** as its efficiency in protecting banks from losses is being debated. Regulators may refine some rules. Basel II allows regulators to modify rules from time to time as they feel necessary.
- **US banks' MBS holdings rose by $2bn** for the week ending February 27, 2008. Holdings in residential mortgage loans rose by $6bn while C&I loans grew by $4bn. AFS portfolio gains/losses fell to a $9.3bn loss.
- **MBA Weekly Survey:** For the week ending February 29, the purchase application index rose 1.4% to 363.1 and the refinance index rose by 4.5% to 2,569 (seasonally adjusted).
- **Freddie Primary Survey:** For the week ending March 6, 2008, 30-year conventional conforming fixed-rate mortgages averaged 6.03% (an average of 0.5 point for the week), about 21bp lower than the previous week.
- **Primary dealer MBS positions** dropped by $5bn to $60bn but remain at elevated levels.
- Fixed-rate agency gross and net issuance in February was $116bn and $52bn, respectively (including 40-years and IOs). So far, **gross issuance in March is $36bn.**

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EXHIBIT 5

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EXHIBIT 99.1

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Risk Exposures
($ in millions)

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<S>	November 30, 2007 <C>	November 9, 2007 <C>	August 31, 2007 <C>
AAA - Super Senior Exposure			
High-Grade Collateral	167	169	166
Mezz Collateral	597	704	778
CDO((2)) Collateral	1	1	19
Subtotal: AAA - Super Senior Exposure	765	874	963
Below-AAA Exposure	(10)	10	165
Total: ABS CDO Exposure	755	884	1,128
CDO Warehouse	-	-	944
Total: ABS CDO-Related Exposures	755	884	2,072
US Subprime Mortgage Exposure			
Subprime Whole Loans	496	530	1,272
IG Subprime Securities	1,062	1,236	1,245
Non-IG Subprime Securities	211	73	313
ABS CDS	(2,351)	(1,891)	(1,711)
Total: US Subprime Mortgage Exposure	(582)	(52)	1,119

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EXHIBIT 99.1

Risk Exposures

AAA - Super Senior Exposure:	NOV 9 2007 (millions)	AUG 31 2007 (millions)
High - Grade Collateral	$169	$166
Mezz Collateral	$704	$778
CDO^2 Collateral	$1	$19
TOTAL AAA - Super Senior Exposure	$874	$963
TOTAL Below-AAA Exposure	$10	$165
Total ABS CDO Exposure	$884	$1,128
Total CDO Warehouse	$0	$944
Total ABS CDO-Related Exposures	$884	$2,072

US Subprime Mortgage Exposure

Subprime Whole Loans	$530	$1,272
IG Subprime Securities	$1,236	$1,245
Non-IG Subprime Securities	$73	$313
ABS CDS	-$1,891	-$1,711
Total US Subprime Mortgage Exposure	-$52	$1,119

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Source: Exhibit 99.1 to Bear Stearns Form 8-K, filed December 21, 2007 (the document is dated December 20, 2007, but the SEC website states that it was filed December 21, 2007), available at http://www.sec.gov/Archives/edgar/data/777001/000091412107002737/be11362326-ex99_1.txt and Exhibit 99.1 to Bear Stearns Form 8-K, filed November 15, 2007, available at http://www.sec.gov/Archives/edgar/data/777001/000091412107002498/be10992974-ex99_1.txt).

EXHIBIT 6

EXHIBIT 6

Purported Inflation and Price Moves Due to Alleged Fraud*

Date [A]	BSC Price [B]	BSC Total Return [C]	Abnormal Return [D]	Sig [E]	Non-Fraud-Related [F]	Expected Return [G]	Adjusted Expected Return [H]	But-For Price [I]	Inflation [J]	Inflation Dissipated Each Day, % [K]	Inflation Dissipated Each Day, $ [L]	Inflation Based on Const-$ Model [M]
12/19/07	90.60	-2.15%	-3.65%	***				11.51	79.09			
12/20/07	91.42	0.91%	0.74%		0	0.16%	0.16%	12.33	79.09	-0.74%	-0.67	66.26
12/21/07	89.95	-1.61%	-5.46%	***	0	3.86%	3.86%	12.80	77.15	5.46%	4.99	66.93
12/24/07	88.80	-1.28%	-2.29%	***	1	1.01%	-1.28%	12.64	76.16	0.00%	0.00	61.94
12/26/07	89.29	0.55%	0.01%		0	0.54%	0.54%	12.71	76.58	-0.01%	-0.01	61.94
12/27/07	87.71	-1.77%	0.57%		0	-2.34%	-2.34%	12.41	75.30	-0.57%	-0.51	61.95
12/28/07	87.35	-0.41%	-0.45%		0	0.04%	0.04%	12.41	74.94	0.45%	0.39	62.45
12/31/07	88.25	1.03%	-0.10%		0	1.13%	1.13%	12.55	75.70	0.10%	0.09	62.06
01/02/08	85.30	-3.34%	0.23%		0	-3.57%	-3.57%	12.11	73.19	-0.23%	-0.20	61.97
01/03/08	83.83	-1.72%	-0.68%		0	-1.05%	-1.05%	11.98	71.85	0.68%	0.58	62.18
01/04/08	78.87	-5.92%	-2.74%	***	1	-3.18%	-5.92%	11.27	67.60	0.00%	0.00	61.60
01/07/08	76.25	-3.32%	-2.04%	**	1	-1.28%	-3.32%	10.90	65.35	0.00%	0.00	61.60
01/08/08	71.17	-6.66%	-2.49%	***	1	-4.17%	-6.66%	10.17	61.00	0.00%	0.00	61.60
01/09/08	74.82	5.13%	3.23%	***	1	1.90%	5.13%	10.69	64.13	0.00%	0.00	61.60
01/10/08	77.75	3.92%	0.76%		0	3.16%	3.16%	11.03	66.72	-0.76%	-0.57	61.60
01/11/08	79.90	3.18%	2.26%	***	1	0.91%	3.18%	11.38	68.52	0.00%	0.00	62.16
01/14/08	81.80	2.38%	0.60%		0	1.78%	1.78%	11.58	70.22	-0.60%	-0.48	62.16
01/15/08	77.57	-5.17%	-0.67%		1	-4.50%	-5.17%	10.98	66.59	0.00%	0.00	62.64
01/16/08	79.05	1.91%	-0.76%		0	2.67%	2.67%	11.28	67.77	0.76%	0.59	62.64
01/17/08	74.44	-5.83%	-0.37%		0	-5.46%	-5.46%	10.66	63.78	0.37%	0.29	62.05
01/18/08	72.39	-2.75%	-2.48%	***	1	-0.27%	-2.75%	10.37	62.02	0.00%	0.00	61.76
01/22/08	77.84	7.53%	3.81%	***	1	3.72%	7.53%	11.15	66.69	0.00%	0.00	61.76
01/23/08	87.00	11.77%	5.50%	***	1	6.27%	11.77%	12.46	74.54	0.00%	0.00	61.76
01/24/08	87.74	0.85%	1.45%	*	1	-0.60%	0.85%	12.57	75.17	0.00%	0.00	61.76
01/25/08	87.03	-0.81%	3.13%	***	1	-3.94%	-0.81%	12.46	74.57	0.00%	0.00	61.76
01/28/08	91.10	4.68%	1.58%	*	1	3.10%	4.68%	13.05	78.05	0.00%	0.00	61.76
01/29/08	91.58	0.53%	0.04%		0	0.49%	0.49%	13.11	78.47	-0.04%	-0.04	61.76
01/30/08	88.26	-3.63%	-3.34%	***	1	-0.28%	-3.63%	12.64	75.62	0.00%	0.00	61.80
01/31/08	89.65	1.57%	0.05%		0	1.53%	1.53%	12.83	76.82	-0.05%	-0.04	61.80

EXHIBIT 6

Purported Inflation and Price Moves Due to Alleged Fraud*

Date [A]	BSC Price [B]	BSC Total Return [C]	Abnormal Return [D]	Sig [E]	Non-Fraud-Related [F]	Expected Return [G]	Adjusted Expected Return [H]	But-For Price [I]	Inflation [J]	Inflation Dissipated Each Day, % [K]	Inflation Dissipated Each Day, $ [L]	Inflation Based on Const-$ Model [M]
02/01/08	92.89	3.61%	1.43%	*	1	2.19%	3.61%	13.29	79.60	0.00%	0.00	61.84
02/04/08	91.00	-2.03%	0.09%		0	-2.13%	-2.13%	13.01	77.99	-0.09%	-0.08	61.84
02/05/08	86.11	-5.37%	0.43%		0	-5.80%	-5.80%	12.25	73.86	-0.43%	-0.39	61.93
02/06/08	82.25	-4.48%	-2.74%	***	1	-1.74%	-4.48%	11.71	70.54	0.00%	0.00	62.32
02/07/08	83.03	0.95%	-0.70%		0	1.65%	1.65%	11.90	71.13	0.70%	0.58	62.32
02/08/08	80.67	-2.84%	-0.49%		0	-2.36%	-2.36%	11.62	69.05	0.49%	0.41	61.74
02/11/08	79.76	-1.13%	-0.25%		0	-0.88%	-0.88%	11.52	68.24	0.25%	0.20	61.33
02/12/08	78.93	-1.04%	0.50%		0	-1.54%	-1.54%	11.34	67.59	-0.50%	-0.40	61.13
02/13/08	80.53	2.03%	1.63%	**	1	0.40%	2.03%	11.57	68.96	0.00%	0.00	61.53
02/14/08	78.47	-2.56%	-0.59%		0	-1.97%	-1.97%	11.34	67.13	0.59%	0.48	61.53
02/15/08	82.79	5.51%	4.66%	***	0	0.85%	0.85%	11.44	71.35	-4.66%	-3.66	61.06
02/19/08	80.02	-3.35%	-0.57%		0	-2.77%	-2.77%	11.12	68.90	0.57%	0.47	64.71
02/20/08	83.05	3.79%	0.82%		0	2.96%	2.96%	11.45	71.60	-0.82%	-0.66	64.24
02/21/08	82.23	-0.99%	0.23%		0	-1.21%	-1.21%	11.31	70.92	-0.23%	-0.19	64.90
02/22/08	85.16	3.56%	1.48%	*	1	2.09%	3.56%	11.71	73.45	0.00%	0.00	65.09
02/25/08	86.72	1.83%	0.16%		0	1.67%	1.67%	11.91	74.81	-0.16%	-0.14	65.09
02/26/08	86.48	-0.28%	0.49%		0	-0.76%	-0.76%	11.82	74.66	-0.49%	-0.42	65.22
02/27/08	87.30	0.95%	-1.17%		0	2.12%	2.12%	12.07	75.23	1.17%	1.01	65.65
02/28/08	84.22	-3.53%	-0.08%		0	-3.45%	-3.45%	11.65	72.57	0.08%	0.07	64.64
02/29/08	79.86	-5.18%	-0.50%		0	-4.68%	-4.68%	11.11	68.75	0.50%	0.42	64.57
03/03/08	77.32	-3.18%	-0.81%		0	-2.37%	-2.37%	10.84	66.48	0.81%	0.65	64.15
03/04/08	77.17	-0.19%	-0.33%		0	0.13%	0.13%	10.86	66.31	0.33%	0.26	63.50
03/05/08	75.78	-1.80%	-1.94%	**	0	0.14%	0.14%	10.87	64.91	1.94%	1.50	63.24
03/06/08	69.90	-7.76%	-2.86%	***	1	-4.90%	-7.76%	10.03	59.87	0.00%	0.00	61.75
03/07/08	70.08	0.26%	-0.06%		0	0.32%	0.32%	10.06	60.02	0.06%	0.04	61.75
03/10/08	62.30	-11.10%	-7.07%	***	0	-4.03%	-4.03%	9.66	52.64	7.07%	4.95	61.71
03/11/08	62.97	1.08%	-6.59%	***	0	7.67%	7.67%	10.40	52.57	6.59%	4.11	56.75
03/12/08	61.58	-2.21%	-0.30%		0	-1.91%	-1.91%	10.20	51.38	0.30%	0.19	52.65
03/13/08	57.00	-7.44%	-9.53%	***	0	2.09%	2.09%	10.41	46.59	9.53%	5.87	52.46

EXHIBIT 6

Purported Inflation and Price Moves Due to Alleged Fraud*

Date [A]	BSC Price [B]	BSC Total Return [C]	Abnormal Return [D]	Sig [E]	Non-Fraud-Related [F]	Expected Return [G]	Adjusted Expected Return [H]	But-For Price [I]	Inflation [J]	Inflation Dissipated Each Day, % [K]	Inflation Dissipated Each Day, $ [L]	Inflation Based on Const-$ Model [M]
03/14/08	30.00	-47.37%	-41.08%	***				6.83	23.17	41.08%	23.42	46.59
03/17/08	4.81	-83.97%	-77.24%	***				4.81	0.00	77.24%	23.17	23.17

Sum of Inflation Dissipated Each Day in Dollars During the Leakage Period: 19.67

Sum of Inflation Dissipated Each Day in Dollars During the Entire Period 12/20/07 - 3/17/08: 66.26

* This analysis is based on the data from Finnerty Report Attachment 31; Compass Lexecon used Professor Finnerty's methodology to illustrate the alternative approach to calculation of inflation ribbon.

Notes: (1) Data in columns [A] though [J] is taken directly from Finnerty Report Attachment 31.

(2) On days where Non-Fraud-Related = 0, Inflation Dissipated Each Day, %, (column [K]) is the Abnormal Return in [D] times -1, for other days this variable is zero.

(3) Inflation Dissipated Each Day, $, (column [L]) is the Inflation Dissipated Each Day, %, from [K], times the BSC price from [B] on the prior day.

(4) Inflation Based on Const-$ Model (column [M]) on each day is the sum of the values of Inflation Dissipated Each Day, $, from [L] over all the subsequent days.

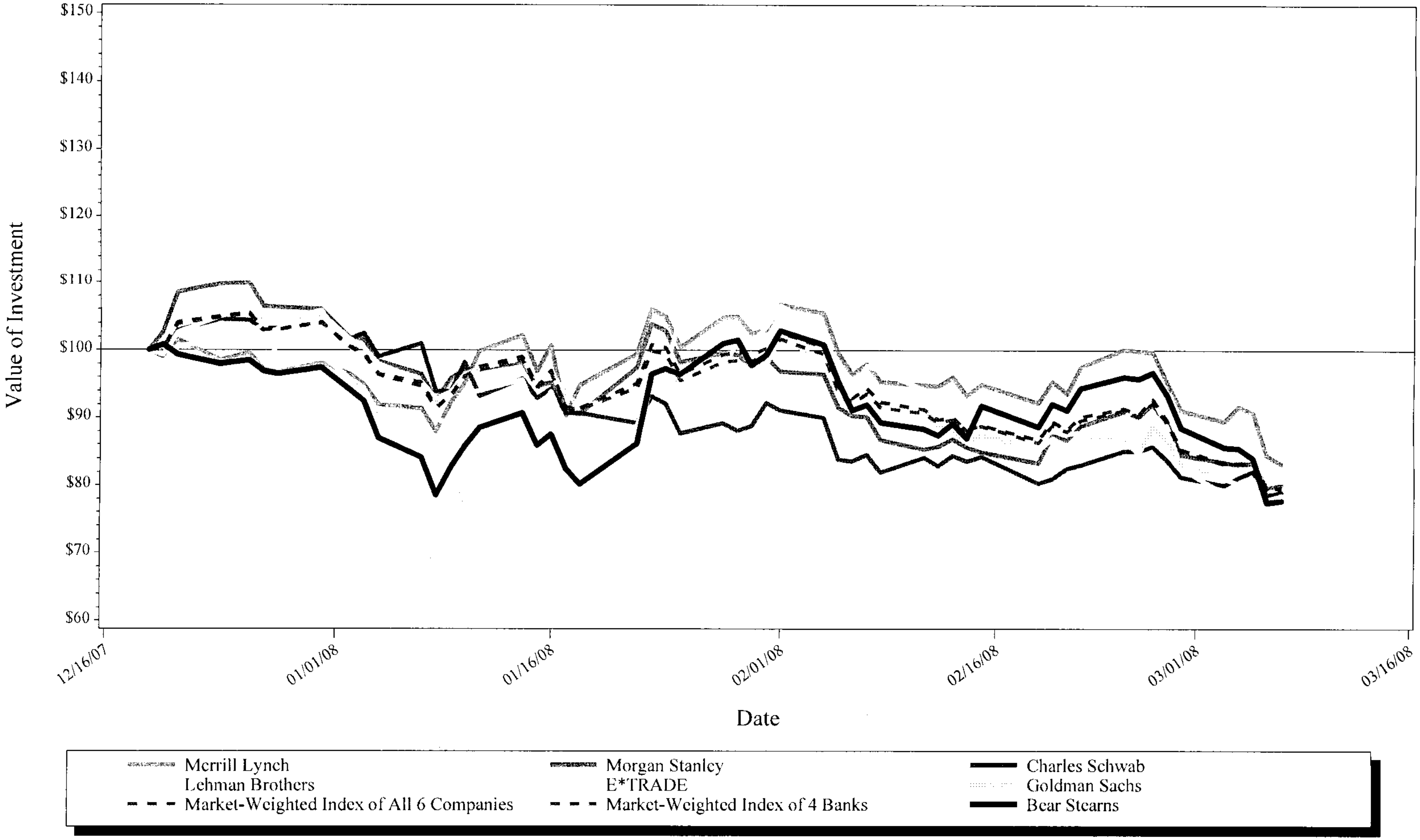
EXHIBIT 7

EXHIBIT 7

CONFIDENTIAL

Value of $100 Invested in Bear Stearns Companies Inc., Firms in Professor Finnerty's Industry Index, And Market-Weighted Indices

December 20, 2007 - March 7, 2008



Notes: Market-Weighted Index of All 6 Companies includes Charles Schwab Corporation, E*TRADE Financial Corp., Goldman Sachs Group, Inc., Lehman Brothers Holding Inc., Merrill Lynch & Co., and Morgan Stanley. Market-Weighted Index of 4 Banks includes Goldman Sachs Group, Inc., Lehman Brothers Holding Inc., Merrill Lynch & Co., and Morgan Stanley.

Source: Bloomberg.

EXHIBIT 8

EXHIBIT 8
Cumulative Abnormal Return*

Period	Cumulative Abnormal Return	T-Statistic	Significant?
December 20, 2007 - March 7, 2008	-5.12%	-1.03	No

* Cumulative Abnormal Return is calculated using Professor Finnerty's regression output (*see* Finnerty Report Attachments 19 and 31), over the period from December 20, 2007 - March 7, 2008, using only the abnormal returns on those dates where Professor Finnerty does not find the price move to be caused by the non-fraud-related factors. T-statistic calculated by summing the t-statistics in Professor Finnerty's Attachment 19 during the same period on the same days, and then dividing by a square root of the number of days.

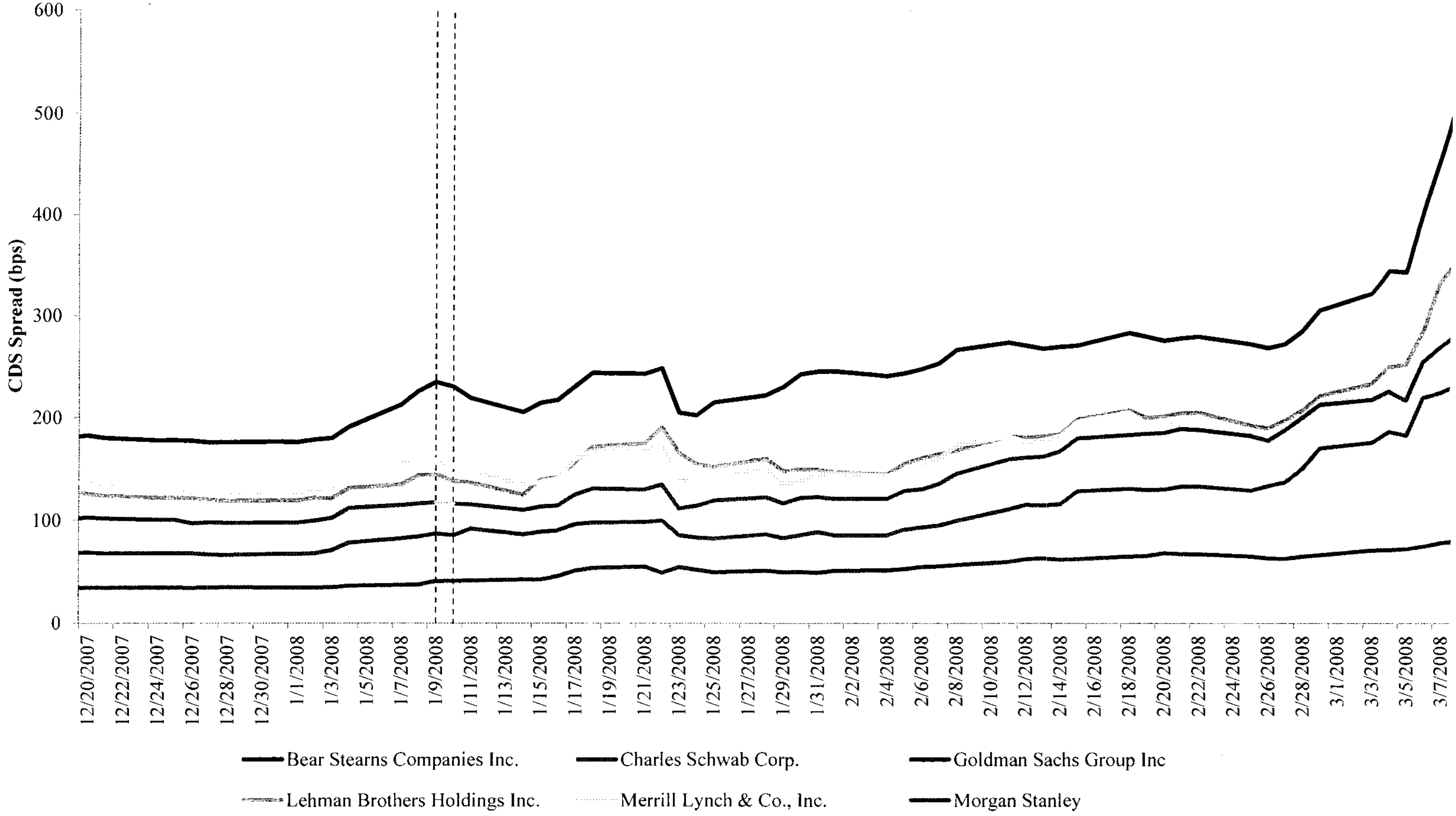
EXHIBIT 9

CONFIDENTIAL

EXHIBIT 9

5-Year Senior CDS Spreads for Bear Stearns Companies Inc., and Firms in Professor Finnerty's Industry Index

December 20, 2007 - March 7, 2008



Notes: Vertical lines reference Sherman's stock purchases. CDS spreads for E-Trade were not available from CMA datasource.
Source: CMA.

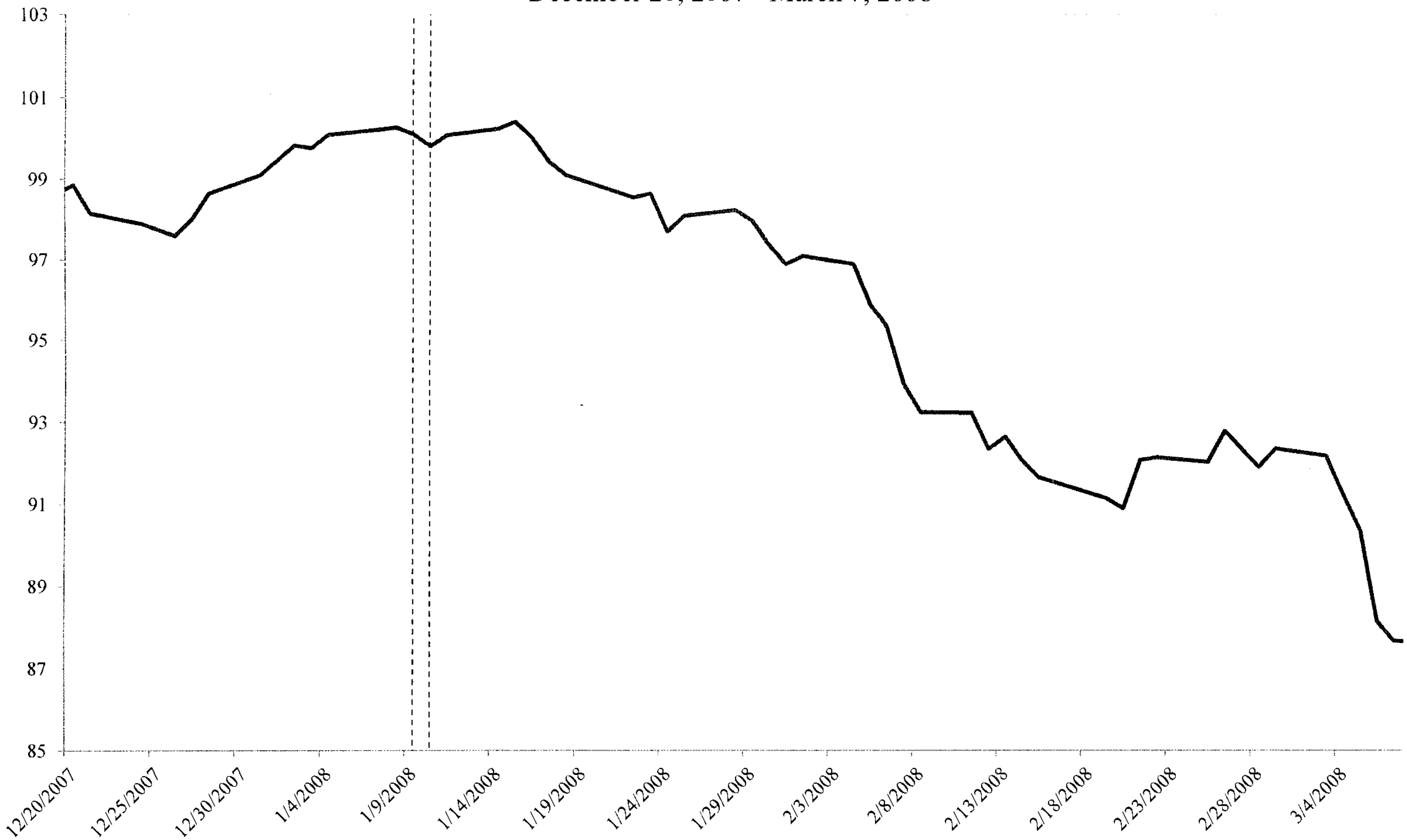
EXHIBIT 10

CONFIDENTIAL

EXHIBIT 10

Price of Non-Agency Investment Grade Barclays CMBS Index

December 20, 2007 - March 7, 2008



Note: Vertical lines reference Sherman's stock purchases.
Source: Barclays Capital.

EXHIBIT 11

US Banks | March 17, 2008

Underweight | USA

J.P. Morgan Chase

Outperform

JPM | **USD36.54***

Analyst(s): Andrew Marquardt Andrew.Marquardt@fpk.com 212-857-6137

Fox-Pitt Kelton Cochran Caronia Waller

Annc'd BSC Deal Highlights Capital Is King & JPM Has It

Data	
52-week range (USD)	36.48-53.20
Price Target (USD)	40.00
Upside/downside to price target (%)	9.5
Market cap (USDm)	124,109.6
Dividend (USD)	5,118.45
Dividend Yield (%)	14,007.8

Performance (%)

	1W	1M	3M	YTD
Price performance	-2.7	-14.2	-19.2	-16.3
Rel. S&P 500	-2.3	-10.2	-7.9	-4.6
Rel. FPKCCW Banks	-5.9	-5.0	-9.5	-6.4

Operating EPS (USD)
Quarterly EPS breakdowns

	2007	2008e	2009e
1Q	1.34	-0.22	na
Consensus		0.70	na
2Q	1.20	0.49	na
Consensus		0.86	na
3Q	0.97	1.11	na
Consensus		0.90	na
4Q	1.00	1.15	na
Consensus		0.96	na
Annual	4.52	2.53	4.00
Consensus		3.57	4.34

Cash EPS (USD)
Quarterly EPS breakdowns

	2007	2008e	2009e
1Q	1.42	-0.17	na
2Q	1.32	0.56	na
3Q	1.00	1.17	na
4Q	0.90	1.20	na
Annual	4.66	2.79	4.26

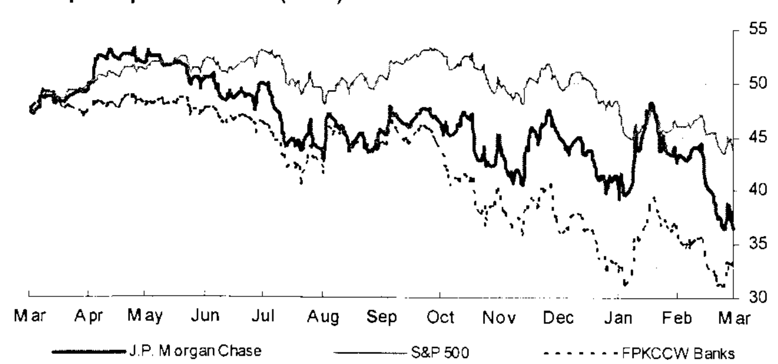
Valuation Data

YE (Dec 31)	2007	2008e	2009e
Operating P/E (x)	8.1	14.5	9.1
Cash P/E (x)	7.8	13.1	8.6
FPK Large Cap Bank OPER P/E (x)	10.4	14.4	10.2
FPK Large Cap Bank cash P/E (x)	10.2	13.5	10.2
BVPS (USD)	36.59	37.68	40.26
P/BV (x)	1.00	0.97	0.91
ROE (%)	12.9	7.1	10.6
Tangible BVPS (USD)	22.03	23.12	25.70
Price/Tangible BV (x)	1.7	1.6	1.4

**Price as at close on Mar 14, 2008*

- **JPM annc'd it will acquire Bear Stearns** (BSC; $30.00; Outperform) for about $2/shr ($224m deal value) in an all stock deal w/fixed exchange ratio of 0.05473 JPM shares per share of BSC. Deal includes special financing from the Fed, regulatory approvals, and should close by end of 2Q.
- **Take-under based on further b/s hits and de-leveraging impact.** With the deal price of $2/shr (vs Fri close of $30/shr), there are clearly hits to BSC's balance sheet and impairment not properly reflected. We believe JPM derived the price via est'd further write-downs of leveraged loans, prime/alt-a, and CMBS (we can get to $4b) and de-leveraging impact (nearly $6b), which leaves cushion of about $550m.
- **Accretive to earnings—we est by 7% to '09** assuming norm earnings and full-integrated. This is based on mgmt's est that deal will add about $1b+/- to earnings and about 6.4 million shares. Based on our current EPS est for JPM of $4.00 for '09, this implies EPS closer to $4.30 or 7% accretive.
- **Est'd IRR very attractive at 35%** for this deal assuming 100% incremental earnings by 2011, long-term growth of 8%, and terminal value of 8x (conservative assumptions, in our view).
- **Strategic rationale clear** as it strengthens JPM's capital markets platform (gain leading share in prime brokerage, enhances equities platform, and expands client franchise and wallet share), compliments clearing capabilities, and adds to wealth and international businesses.
- **Reiterate Outperform.** This deal illustrates JPM's b/s strength, proven ability to execute in tough periods, and shrewd deal making abilities. We have even greater confidence, esp w/JPM shrs at 1x bv.
- **Implications mixed** as we believe the Fed actions and involvement in BSC take-under illustrates that the Fed is willing to do whatever it takes to restore confidence in the financial system. But, we also believe it highlights risk of leverage and the importance of capital. We continue to focus on high quality names—top picks JPM and WFC ($28.45, Outperform).

Share price performance (USD)



Analyst certifications and required disclosures begin on page 2.
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J.P. Morgan Chase [JPM]

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Risks that may impede achievement of the target price include: Expansion of the net interest margin may be limited given the flattening yield curve environment. Economic risk, acquisition risk.

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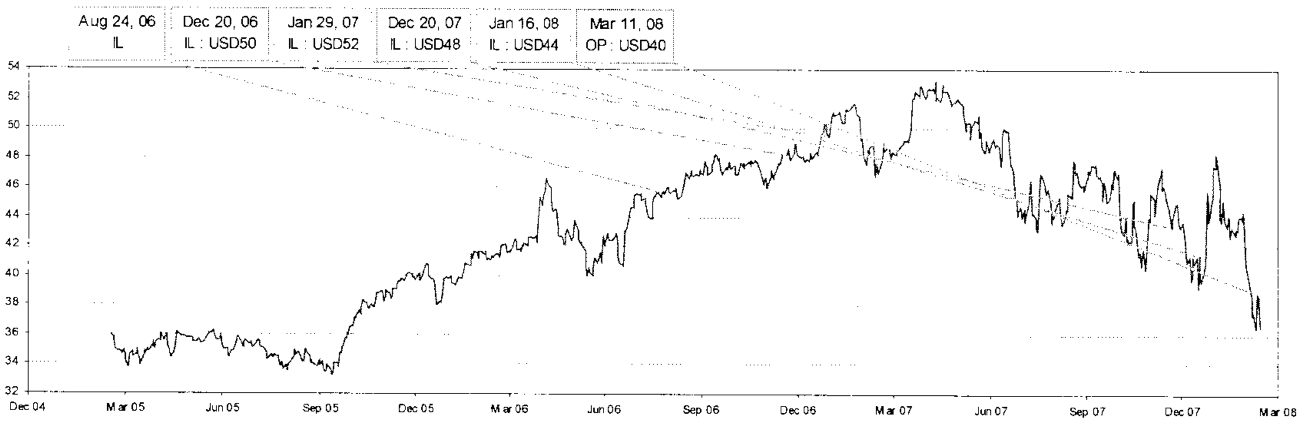
Neither FPK nor its affiliates received compensation for financial services from this company during the past 12 months.

Neither FPK nor its affiliates makes a market in this security.

Historical closing prices and rating/target prices

JPM current rating is: Outperform



Ratings distribution and investment banking involvement

Rating type	% of covered companies currently assigned this rating	% of companies assigned this rating with which FPK has provided investment banking services over the past 12 months
Buy [OP/UW; IL/OW]	35.4%	2.9%
Hold [OP/UW; IL/OW; IL/MW; IL/UW; UP/OW]	51.6%	3.7%
Sell [UP/MW; UP/UW]	13.0%	0.0%

Ratings definition information

Global company rating definitions

Outperform (OP)	We expect the stock to outperform its sector over the next 12 months
In Line (IL)	We expect the stock to perform in line with its sector over the next 12 months
Underperform (UP)	We expect the stock to underperform its sector over the next 12 months

Global sector ranking definitions

Overweight (OW)	We expect the sector to outperform the relevant market index over the next 12 months
Marketweight (MW)	We expect the sector to perform in line with the relevant market index over the next 12 months
Underweight (UW)	We expect the sector to underperform the relevant market index over the next 12 months

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EXHIBIT 12

US Investment Banks and Brokers

Marketweight

March 17, 2008

USA

Bear Stearns

BSC

Outperform

USD4.01*

Analyst(s): David Trone / Ivy De Dianous, CFA David.Trone@fpk.com 212-857-6151

BSC: Could Bear Get Another, Higher Bidder?

Data

52-week range (USD)	4.01-158.39
Price Target (USD)	2.36
Upside/downside to price target (%)	-41.1
Market cap (USDm)	473.5
Dividend (USD)	na
Dividend Yield (%)	na

Performance (%)

	1W	1M	3M	YTD
Price performance	-93.6	-95.2	-95.7	-95.5
Rel. S&P 500	-93.6	-94.9	-95.2	-94.8
Rel. FPKCCW Investment Bank	-93.7	-94.2	-93.9	-93.4

Operating EPS (USD)
Quarterly EPS breakdowns

	2006	2007	2008e
1Q	3.54	3.82 a	0.60
Consensus			0.90
2Q	3.72	3.40 a	2.32
Consensus			1.59
3Q	3.02	1.16 a	2.26
Consensus			1.92
4Q	4.00	-6.90 a	3.28
Consensus			2.35
Annual	14.28	1.48	8.45
Consensus		1.48	6.85

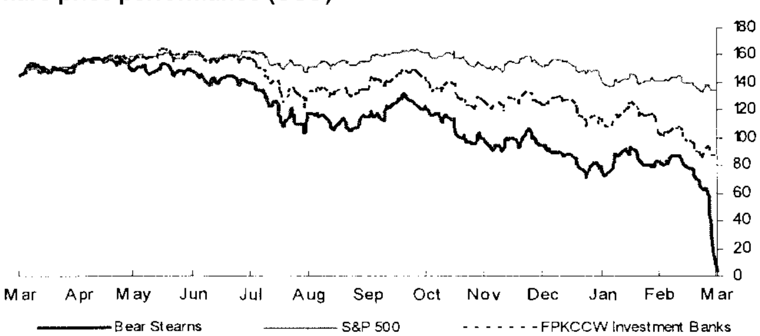
- Today, Bear is trading at $4/shr, despite cutting a deal over the weekend with J.P. Morgan (JPM, $39.77, Outperform) at $2/shr. Thus, the market is pricing in a distinct possibility of a higher bidder emerging at some point.
- Another bidder could rationalize that Bear's current arrangement will bring calm to creditors and counterparties, thus bringing an end to the run-on-the-bank. Moreover, now all brokers have direct Fed access.
- If normal rules apply, Bear's SEC filing on the vote would require 10 business-days, then the material mailing and perusal period requires 20-biz-days. So, unless these rules are waived, the Bear shareholder vote won't happen for 6-8 weeks, plenty of time for circumstances to change.
- If Bear shareholders vote "no", the agreement requires a re-vote at each meeting for 12-mos. If the vote remains at "no" a year from now, then the agreement would be null and no deal would be consummated. Since 30% of the shareholders are employees, a "no" vote is quite plausible, as emotion is involved and they may insist the stock is worth more. Also, another bidder may not need to cut as many jobs.
- In line with our view (see our note from earlier today) and JPM's mgmt commentary, Bear's balance sheet appears marked correctly in a non-fire-sale context. So a buyer that could keep the assets could pay far more than $2, while even one that planned a fire-sale could probably beat $2, which reflected the short-term crisis at hand this weekend.
- If a U.S. comml. bank were to bid, it could ask the Fed to provide the same credit indemnification that JPM enjoys, under the logic that JPM should not get a special deal. If any other type of institution were to bid, they would not likely get support.
- The counterargument is that a U.S. comml bank would have the most to lose by angering the Fed, which seems to want this deal done, to repay JPM for keeping Bear out of a system-threatening bankruptcy.
- Therefore, while there is strong logic behind the theory that another bidder could step up, we believe the practical reality of angering the Fed will ultimately prove preventative. As a result, we believe Bear should trade at the $2.36 bid (our new target), not the current $4.
- Taking no chances at losing its coup, JPM is already on-site at Bear HDQ and directing integration actions, and it has a right to buy the building, both of which provide complications for future bidders.

Valuation Data

YE (Nov 30)	2006	2007	2008e
Operating P/E (x)	0.28	2.7	0.47
BVPS (USD)	na	na	na
P/BV (x)	na	na	na
ROE (%)	18.5	2.3	na
Revenue Growth (%)	24.5	-35.6	na
Net income (USDm)	2,121.2	275.0	na
PTOM (%)	34.1	7.1	na
Comp ratio (%)	47.1	57.6	na
Non-Comp ratio (%)	18.8	35.3	na

**Price as at Mar 17, 2008 11:46*

Share price performance (USD)



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Bear Stearns [BSC]

The method(s) used to determine the valuation and/or price target for this stock is/are: Discounted Cash Flow Valuation

Risks that may impede achievement of the target price include: Extended economic weakness, proprietary trading risk, competitive risk manifesting in weaker profits.

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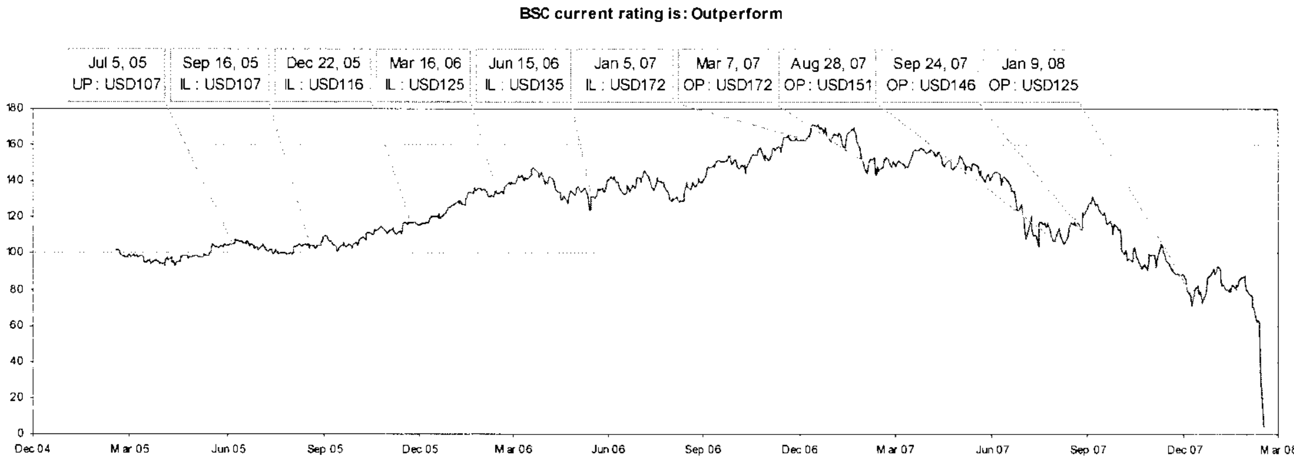
Neither FPK nor its affiliates makes a market in this security.

Historical closing prices and rating/target prices



Ratings distribution and investment banking involvement

Rating type	% of covered companies currently assigned this rating	% of companies assigned this rating with which FPK has provided investment banking services over the past 12 months
Buy [OP/UW; IL/OW]	35.4%	2.9%
Hold [OP/UW; IL/OW; IL/MW; IL/UW; UP/OW]	51.6%	3.7%
Sell [UP/MW; UP/UW]	13.0%	0.0%

Ratings definition information

Global company rating definitions

Outperform (OP)	We expect the stock to outperform its sector over the next 12 months
In Line (IL)	We expect the stock to perform in line with its sector over the next 12 months
Underperform (UP)	We expect the stock to underperform its sector over the next 12 months

Global sector ranking definitions

Overweight (OW)	We expect the sector to outperform the relevant market index over the next 12 months
Marketweight (MW)	We expect the sector to perform in line with the relevant market index over the next 12 months
Underweight (UW)	We expect the sector to underperform the relevant market index over the next 12 months

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